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UNITED STATES DISTRICT COURT

CENTRAL DISTRICT OF CALIFORNIA - WESTERN DIVISION

HONORABLE STANLEY BLUMENFELD, JR., U.S. DISTRICT JUDGE

SANTA CLARITA VALLEY WATER AGENCY,)
)
Plaintiff,)
)
v.) Case No.
) CV 18-6825 SB (RAOx)
WHITTAKER CORPORATION, et al.,)
) Volume 7
Defendants.) (Pages 688 - 846)
)
_____)

REPORTER'S TRANSCRIPT OF TRIAL PROCEEDINGS
TRIAL DAY 4: A.M. SESSION
MONDAY, NOVEMBER 22, 2021
8:03 A.M.
LOS ANGELES, CALIFORNIA

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1 MONDAY, NOVEMBER 22, 2021; 8:03 A.M.

2 LOS ANGELES, CALIFORNIA

3 -oOo-

4 (Out of the presence of the jury:)

08:03AM 5 THE COURTROOM DEPUTY: Calling Item No. 1,
6 Case No. CV 18-06825-SB, Santa Clarita Valley Water Agency
7 versus Whittaker Corporation, et al.

8 Counsel, would you please state your appearances,
9 starting with plaintiff's counsel.

08:03AM 10 MR. RICHARD: Good morning, Your Honor.
11 Patrick Richard on behalf of plaintiff. With me are my
12 colleagues, Ms. Scott, Mr. Gee, and Ms. Micevych.

13 THE COURT: Thank you. Good morning.

08:04AM 14 MR. BLUM: Good morning, Your Honor. Fred Blum for
15 Defendant Whittaker. With me are the client representative,
16 Eric Lardiere, and also Daniel Trowbridge, Scott Fryer, and
17 Matt Gallagher.

18 THE COURT: Good morning. We are outside the
19 presence of the jury.

08:04AM 20 And let me hear who are the next witnesses in order,
21 please, Mr. Richard.

22 MR. RICHARD: Yes, Your Honor. We'll start with
23 Mr. Lardiere who's here. So I'm confident we'll start on time.
24 And then followed by Ms. Stanin.

08:04AM 25 THE COURT: And who's after her?

1 MR. RICHARD: We have Mr. Mesnada. But depending on
2 the timing, we have a video play. So we would just ask for a
3 little bit of flexibility on that. If it appears that after
4 Ms. Stanin -- the parties have estimated -- we had 240 minutes.

08:04AM

5 I think they had at least an hour estimate on cross for
6 Ms. Stanin. She's probably our principal witness in the case.

7 So those are the next four witnesses. I would
8 suggest or request that, after Ms. Stanin, we visit whether
9 it's Mr. Mesnada or the video of Mr. Peloquin.

08:05AM

10 THE COURT: All right. I do want to address the
11 challenged exhibits with respect to Ms. Stanin.

12 So, first, Exhibit 1064. I do believe that there
13 may be a misunderstanding about the Court's ruling in this
14 regard. I don't believe the Court was presented with a

08:05AM

15 question about the appropriate negligence standard with respect
16 to well siting. The issue had to do with specific evidence
17 that was being sought to be admitted, and I only analyzed that
18 evidence.

19 So I'll hear from the plaintiff if you wish to be
20 heard, but it does not appear to me that this evidence would
21 violate the Court's in limine order. This is the water well
22 standards.

08:06AM

23 Mr. Richard, do you wish to be heard?

24 MR. RICHARD: It's Mr. Gee's witness. We're just
25 double-checking that particular document.

08:06AM

1 No objection to that, Your Honor.

2 THE COURT: All right. And then with respect to
3 1417, the plaintiffs object on hearsay grounds. Their response
4 is that the public record exception applies and also the
08:06AM 5 document was relied upon by expert Stanin.

6 And the documents, Operable Unit 7 Work Plan
7 prepared by Hargis, H-a-r-g-i-s, Associates dated July 2nd,
8 1999, it does not appear to the Court that this is a public
9 record. For this to be a public record, it would have to be a
08:07AM 10 record or a statement of a public office or official at the
11 very outset, and then there are other requirements. But it
12 appears to me that this doesn't meet even the threshold.

13 The question is how this was relied upon by
14 Ms. Stanin or Dr. Stanin -- I don't know which -- and what
08:07AM 15 parts of this does the defense intend to rely upon.

16 Mr. Blum?

17 MR. BLUM: Your Honor, it's Ms. -- it's Ms. Stanin,
18 not doctor. Basic -- if you give me a moment, Your Honor, I
19 will tell you specifically.

08:08AM 20 Your Honor, there are certain figures that
21 Ms. Stanin used from this report to show locations of VOCs,
22 particularly TCE. There's only two things I want to use from
23 the report. It's that figure as well as the figure behind it
24 which shows the locations of TCA. And frankly, Your Honor, I
08:08AM 25 don't mind if it's designated for the purpose -- for I.D.

1 purposes only since she clearly relied on it.

2 THE COURT: Well, tell me what you mean when you say
3 that you don't mind if it's used for only identification
4 purposes. The parties have indicated that from time to time,
08:08AM 5 and it just doesn't translate with the Court.

6 There shouldn't be any challenged exhibit presented
7 to the Court when all a party is looking to do is identify a
8 document and do nothing more with it, in which case I'm not
9 even sure why it's being identified.

08:09AM 10 MR. BLUM: Well, Your Honor, my preference is to be
11 able to admit it into evidence. And I -- but honestly, this is
12 not a hill that I want to die on. And there's -- I just want
13 her to be able to say this is what she relied upon and that she
14 did -- and that she also saw that there was something that
08:09AM 15 has -- that a TCA -- and then I can -- I'm going to take that
16 when I get into our case.

17 THE COURT: Well, let me just -- I'll try to
18 conclude it this way. I doubt that I'm going to hear an
19 objection, but maybe I will, that Mr. Blum is unable to rely or
08:09AM 20 refer to something that Ms. Stanin relied upon in formulating
21 her opinions. If that's all he is going to do, he's free to do
22 so and he should do so, in the Court's judgment, without
23 necessarily referring to the document, unless that's particular
24 material.

08:10AM 25 That is to say, presumably, Mr. Blum, you can ask

1 the question of Ms. Stanin about whether certain facts that she
2 has reviewed she has relied upon in formulating her opinions.
3 If she says "No," then there may be an impeachment issue, in
4 which case, it seems to me, you present her with whatever
08:10AM 5 evidence that you have that shows that, in fact, she did,
6 indeed, rely upon this document and the specific portions that
7 you're contending she relied upon.

8 So let me make sure, first of all, whether
9 Mr. Richard or Mr. Gee objects to what the Court has set forth.

08:11AM 10 MR. GEE: Your Honor, we don't mind having the
11 document used for I.D. However, it is a 1999 document
12 that's -- you know, 22 years old. And there's been lots and
13 lots of data collected between then and now. She may have
14 reviewed it for historical purposes, but I suspect that she
08:11AM 15 didn't rely on it.

16 THE COURT: But he's going to establish that as a
17 foundation.

18 So with that, what I'm taking, Mr. Gee, is that you
19 don't object to what the Court has set forth. And again, if
08:11AM 20 I'm putting words in your mouth, let me know. But sometimes I
21 have to try to cut to the chase.

22 MR. GEE: Your words were very well taken and, yes,
23 we agree.

24 THE COURT: All right. So, Mr. Blum, are you able
08:11AM 25 to tell the Court that, based upon Ms. Stanin's deposition,

1 that she's going to say that she relied upon the specific
2 portions of this document that you're claiming she relied upon?

08:12AM 3 MR. BLUM: Your Honor, I believe it's her Figure 19
4 is the location in which she believes there were TCA. It says
5 on the figure taken from the Hargis report.

08:12AM 6 THE COURT: All right. And so to the extent that
7 you can tie portions of this document to her opinions, that is,
8 she says she relied upon particular portions like this figure,
9 then it seems to me you can proceed in the manner that I have
10 described.

11 MR. BLUM: That's fine, Your Honor.

08:12AM 12 THE COURT: And then if you need to impeach her, if
13 she says, for example, yes, I relied upon it, and then it turns
14 out that she's saying the document says something different
15 than what it says, then it seems to me you can present her with
16 it.

17 MR. BLUM: Yes, sir.

08:12AM 18 THE COURT: All right. Then moving on to
19 Exhibit 1418, once again, this does not appear to me to be a
20 document that was prepared by the Government or adopted by the
21 Government within the meaning of Federal Rule of Evidence
22 803-8, but let me hear from the defense, please.

23 MR. BLUM: Your Honor, it's the same issue as we
24 had -- as with the other one.

08:13AM 25 THE COURT: All right. And so the Court's ruling,

1 without objection, will be the same. To the extent that you
2 want to reference this, you may. Or may not need to. That's
3 fine.

08:13AM 4 Let me also just indicate that in the future, if the
5 parties are simply saying that they're going to introduce
6 something by way of identification, then this should not be on
7 the challenged list for the Court. The parties need to go one
8 step further and say, well, okay, I'm identifying it for this
9 purpose. And if it turns out that I need to present this
08:13AM 10 document, I'm going to do so. And then I need to hear whether
11 there's an objection in that regard because that's what I will
12 be focused on rather than the identification.

13 I believe that concludes the issues with regard to
14 Ms. Stanin. And previously, I spoke with the parties
08:14AM 15 concerning any challenged exhibits for Mr. Lardiere.

16 So then let's take a look at Mr. Masnada,
17 M-a-s-n-a-d-a. And Exhibit 478, is this being offered solely
18 for purposes of the bench trial, or is this intended to go
19 before the jury?

08:14AM 20 Let me ask you, Mr. Richard, since this is a
21 document you intend to introduce.

22 MR. RICHARD: This is -- again, I think it's going
23 to be Mr. Gee's witness, Your Honor. So just one moment.

24 THE COURT: Yes.

08:14AM 25 MR. RICHARD: Yeah, I think this is just to -- for

1 identification and to refresh memory if needed, and I
2 appreciate Your Honor's guidance. Sometimes we have documents
3 that we think we may need to refresh a witness's memory and we
4 put them on the list.

08:15AM 5 THE COURT: And what is the relevance of this for
6 purpose of the jury trial, Mr. Gee?

7 MR. RICHARD: Your Honor, there's -- in part, there
8 is some overlap between jury trial and CERCLA in a sense that
9 there will be -- there are allegations that Santa Clarita
08:15AM 10 Valley Water Agency did not act appropriately and should be
11 apportioned some liability. And Mr. Masnada is at the -- now
12 past general manager who has taken great steps to address the
13 contamination coming from the Whittaker-Bermite site.

14 THE COURT: But how does the procurement of
08:16AM 15 government funding for cleanup or other remedial costs have any
16 relevance to the jury trial?

17 MR. GEE: Well, Your Honor, the -- the, um, permit
18 of government funds was just one of a number of different steps
19 to -- to abate the contamination. Back in the early 2000s, the
08:16AM 20 groundwater aquifer was not very well characterized. And
21 before we could even -- before the parties could even identify
22 or develop a remedy, they had to get funding from somewhere,
23 and \$10 million is a lot for a water agency. So --

24 THE COURT: What I still don't understand is its
08:16AM 25 relevance. So what is the relevance of the sourcing of monies

1 obtained by the agency for purposes of doing whatever
2 contamination cleanup they did?

08:17AM 3 MR. GEE: Okay. Yeah, just to show that the agency
4 bent over backwards to try to address the -- the contamination
5 during the pendency of the -- after the lawsuit and before the
6 settlement.

08:17AM 7 THE COURT: I do not, based upon what I've heard,
8 intend to allow this. So if there is an objection at trial
9 without any further explanation of its relevance, which means
10 there has to be a sufficient foundation, the Court is going to
11 be strongly inclined to sustain an objection. I don't see its
12 relevance.

08:17AM 13 Looking at the next document, the 2007 settlement
14 agreement, do you intend to introduce this document? This
15 says, "marked for identification."

16 MR. GEE: Yes, Your Honor.

17 THE COURT: And tell me what the objection is, then,
18 Mr. Blum, since -- I don't have an objection, only that there's
19 no objection if it's only offered for identification purposes.

08:18AM 20 MR. BLUM: I'm sorry, Your Honor.

21 Your Honor, I'm just trying to pull up the exhibit.

22 THE COURT: It's Exhibit 483-A, and it's the 2007
23 settlement agreement.

24 MR. BLUM: Yes, sir.

08:18AM 25 Can I confer with counsel for a minute, Your Honor?

1 THE COURT: Yes. What I'll do is I'm going to at
2 this point just tentatively indicate that I view this document
3 as being not objected to. It doesn't mean that you can't
4 object. It simply means that, after conferring with counsel,
08:18AM 5 if you have an objection, the burden is on you to raise it with
6 the Court.

7 MR. BLUM: Your Honor, frankly, since we were only
8 told it was identified for -- for identification purposes only,
9 we never did an admissibility analysis.

08:19AM 10 THE COURT: I understand. And hopefully from this
11 point forward -- and I'm sure you will, all counsel will
12 proceed to the next step.

13 All I'm saying is I'm maintaining the status quo.
14 It doesn't mean I'm admitting the document.

08:19AM 15 MR. BLUM: And I will try, if we have a moment
16 before the jury comes in, to tell counsel what our position is.

17 THE COURT: Very well.

18 Then moving on to the next document for
19 Mr. Masnada, and this is what the defendant intends to use that
08:19AM 20 has drawn an objection. It's Exhibit 1382, the April 19, 2020,
21 California Water Resources Control Board Guideline 97-005
22 documentation for Valencia Water Davison -- I'm not sure if
23 that's right -- but revised final draft.

24 Let me hear from the defense as to more specifically
08:20AM 25 what the probative value is of this document.

1 MR. GALLAGHER: Your Honor, the probative value is
2 they intend to introduce -- I think it's Exhibit 90 which is a
3 prior version of this. That prior version is missing key
4 information about the proposed remedy to deal with the V-201
08:20AM 5 VOC hits, and specifically this document adds blending as do a
6 number of these documents that come after this. And so
7 blending is what the plaintiff is proposing to deal with the
8 VOCs at V-201. And the one that they intend to introduce that
9 predates all of these is missing that language.

08:20AM 10 THE COURT: All right. And also, just for guidance
11 for the parties, it is useful for the parties to focus the
12 Court on the specific portions of the document that you're
13 fighting over. I raise that in connection with this document
14 because this is 30, 40, 50 -- I don't know how many page
08:21AM 15 document. Put yourself in the Court's shoes.

16 MR. GALLAGHER: Understood, Your Honor. I could
17 direct you to the section if you'd like.

18 THE COURT: I don't think I need to at this point
19 because I think I understand what the purpose of this, the
08:21AM 20 specific item is. But I'm just -- I'm just asking all
21 counsel -- and I know you're busy -- but to take a look at this
22 document. I sure -- I'm sure that you all -- that you have
23 someone, a lawyer, who is looking at what you're submitting to
24 the Court. And put yourself in the Court's shoes and say,
08:21AM 25 okay, this is the information I have. Am I able to decide this

1 issue? How would I go about deciding this issue?

2 And if you want to either avoid some of the
3 frustration that the Court has experienced and/or try to get
4 more informed rulings and have more of the Court's time, I
08:22AM 5 spent time looking through this entire document trying to read
6 through it, trying to discern for myself what it is that you
7 were fighting about, and it took me 20 times longer than it
8 otherwise would have if I simply know what it is that you're
9 fighting over.

08:22AM 10 And again, I appreciate the fact that you're all
11 very busy, but so is this Court, and I would appreciate if you
12 would be mindful of the Court's time.

13 MR. GALLAGHER: Understood, Your Honor.

14 THE COURT: Let me hear why I shouldn't allow this
08:22AM 15 document, Mr. Gee. If you're going to be introducing a prior
16 iteration of this document, why would I exclude it?

17 MR. GEE: Well, first of all, Your Honor, the
18 exhibit that was presented earlier was just the fifth -- the
19 cover page to the report and not the entire report. But more
08:22AM 20 importantly, Your Honor, Mr. Masnada retired in 2015, so there
21 would be no foundation for him to know what this document is.

22 THE COURT: All right. Well, I see the objection as
23 irrelevant, misleading, and draft report. Now the objection is
24 foundation. Seems like a fairly good objection to me,
08:23AM 25 Mr. Gallagher.

1 MR. GALLAGHER: And that may be. Then the issue
2 becomes that Exhibit 90 is also -- lacks foundation as
3 Mr. Masnada was not there in that prior iteration that they
4 propose to introduce.

08:23AM

5 THE COURT: All right. And so maybe you can work it
6 out because I don't intend to sustain an objection on
7 foundational grounds just to help one party. So if the Court
8 is faced with the foundation objection, which it appears to me
9 would be an appropriate one, if Mr. Masnada has no knowledge of

08:23AM

10 the particular document that you're seeking to introduce
11 through him, I'm going to sustain it for both sides unless you
12 both want to introduce it through him, knowing that, otherwise
13 perhaps, you're going to have to perhaps introduce it through
14 some other party.

08:24AM

15 All right. With that, I will -- we now have a few
16 minutes, and I know you wanted to meet and confer about one
17 document. We still have Mr. Trudell, but there will be time to
18 address those challenged exhibits.

19 We'll be in recess until 8:30.

08:24AM

20 I am going to have Mr. Cruz bring them in at 8 :30
21 sharp, so please do be ready by 8:30. Thank you.

22 MR. RICHARD: Thank you, Your Honor.

23 MR. GALLAGHER: Thank you, Your Honor.

24 (Break taken.)

08:30AM

25 (In the presence of the jury:)

1 THE COURT: We are on the record in Santa Clarita
2 Valley Water Agency versus Whittaker Corporation. And we have
3 all counsel present as well as the jury who has joined us.

4 Good morning, ladies and gentlemen.

08:31AM

5 THE JURY: Good morning.

6 THE COURT: I hope you all had a very nice weekend,
7 and on a positive front we have a fairly short week this week.
8 You may recall that we're still in the plaintiff's case in
9 chief, and we're on to their next witness.

08:32AM

10 And so, Mr. Richard, if you would kindly call your
11 next witness.

12 MR. RICHARD: Yes, Your Honor. Plaintiff will call
13 Mr. Eric Lardiere.

14 THE COURT: If you'd please walk around.

08:32AM

15 THE COURTROOM DEPUTY: Good morning, sir. Would you
16 please walk around.

17 Sir, would you please raise your right hand to be
18 sworn.

08:32AM

19 Sir, do you solemnly swear that the testimony you
20 shall give in the cause now before this Court shall be the
21 truth, the whole truth, and nothing but the truth, so help you
22 God?

23 THE WITNESS: Yes.

08:32AM

24 THE COURTROOM DEPUTY: Thank you, sir. Would you
25 please be seated.

1 Sir, for the record, would you please state your
2 name and then spell your last name.

3 THE WITNESS: Eric Lardiere, L-a-r-d-i-e-r-e.

4 THE COURT: Mr. Richard, you may proceed.

08:33AM 5 MR. RICHARD: Thank you, Your Honor.

6 **ERIC LARDIERE,**

7 **PLAINTIFF'S WITNESS, WAS SWORN AND TESTIFIED AS FOLLOWS:**

8 **DIRECT EXAMINATION**

9 BY MR. RICHARD:

08:33AM 10 Q. Good morning, Mr. Lardiere. How are you?

11 A. Good morning. Fine. How are you?

12 Q. So far so good.

13 Can you please tell us who your current employer is?

14 A. Meggitt USA, Inc.

08:33AM 15 Q. And what's the relationship between
16 Meggitt USA, Inc., and Whittaker Corporation?

17 A. Meggitt USA, Inc., owns the stock of
18 Whittaker Corporation.

19 Q. And at some point in time, you began work with
08:33AM 20 Whittaker Corporation back in 2000?

21 A. It was a short amount of time where I was an
22 employee on payroll of Whittaker Corporation, about two years
23 beginning in April 2000.

24 Q. And with Whittaker, you've been a vice president,
08:34AM 25 secretary, general counsel, and you're currently president of

1 Whittaker; is that right?

2 A. My original titles were general counsel, vice
3 president, and secretary of Whittaker Corporation. And I'm
4 currently president and secretary of Whittaker Corporation.

08:34AM 5 Q. Okay. And as of August 2019, is it fair to say you
6 were not sure if Whittaker Corporation had any other employees?

7 A. Yes. That was the testimony in my deposition.

8 Q. I'm sorry?

9 A. Yes. That was my testimony in a deposition in this
08:34AM 10 case.

11 Q. And that's still true?

12 A. No, I know the -- I know the status now.

13 Q. Okay. And in 2019 -- as of 2019, you believed you
14 were a director of Whittaker Corporation; is that right?

08:34AM 15 A. Correct.

16 Q. And do you still believe that?

17 A. Yes.

18 Q. And is it fair to say that, as of August 2019, you
19 weren't sure if Whittaker had any other directors?

08:35AM 20 A. No.

21 Q. If you --

22 A. I -- there were other directors in 2019.

23 Q. Right. You just weren't sure if there were at that
24 time?

08:35AM 25 A. I was sure there were others. I wasn't sure of

1 their names.

2 Q. Can we look at the -- you mentioned a deposition
3 from August 2019. Why don't we look at page 17, lines 2 to 4.

4 So you were asked, *"Who are the other directors,*
08:35AM 5 *if any?"*

6 *"I would have to check our records on that. I'm*
7 *not entirely sure."*

8 And it's your testimony that you knew there were
9 other directors, you just didn't know their names; is that

08:35AM 10 right?

11 A. That was the question asked, and that's how I tried
12 to answer it.

13 Q. Okay. And at some point -- thank you.

14 At some point your responsibilities for Whittaker
08:36AM 15 included being custodian of records; is that right?

16 A. I have assumed that status in connection with a
17 bankruptcy case and a declaration in support thereof.

18 Q. I'm sorry. Were you not custodian of records
19 through 2019 at least?

08:36AM 20 A. I think that's a fair comment; although, I only took
21 that formally in one case, I believe.

22 Q. Didn't you also take that formally in this case?

23 A. I don't recall.

24 Q. Do you know Mr. Gaynor Dawson?

08:36AM 25 A. I'm blanking on Mr. Gaynor Dawson's name.

1 Q. Okay. Do you recall that one or more of the experts
2 in this case came to you and spoke to you as the custodian of
3 records to ask about the past records of Whittaker, things like
4 operational logs and things of that nature?

08:37AM

5 MR. GALLAGHER: Objection, Your Honor. Lacks
6 foundation.

7 THE WITNESS: I don't recall Mr. Gaynor --

8 THE COURT: The objection is sustained, and the jury
9 is to disregard the response.

08:37AM

10 Q. (BY MR. RICHARD:) Sir, do you -- do you recall any
11 of the experts hired by Whittaker in this case coming to you to
12 talk about records that Whittaker maintained?

13 A. I'm sorry. I -- I don't.

08:37AM

14 Q. Okay. So is it fair to say that, if one of those
15 experts does testify that they spoke to you, you just don't
16 have a memory today one way or the other? Is that fair?

17 A. That's true.

08:37AM

18 Q. Okay. And as of 2001, going back to when you
19 were -- the first part of your tenure with Whittaker, your
20 responsibilities at that time included overseeing investigation
21 regarding claims of perchlorate contamination made by the
22 nearby water agencies. Is that fair?

08:38AM

23 A. I may have missed some of that. Was it an
24 investigation by the water agency? Is that how you phrased
25 that?

1 Q. Did your responsibilities include overseeing an
2 investigation regarding claims made by the neighboring water
3 agencies as to perchlorate contamination?

08:38AM 4 A. There had been a lawsuit, and I supervised the
5 litigation on behalf of Whittaker Corporation.

6 Q. Okay. And currently, is that one of your
7 responsibilities with Whittaker and Meggitt USA is to be
8 responsible for claims made by the water agencies?

08:38AM 9 A. I don't believe there are any claims against
10 Meggitt USA by the water agencies. But, otherwise, for
11 Whittaker Corporation, I supervised the litigation, the defense
12 in this case.

08:39AM 13 THE COURT: Mr. Lardiere, could you kindly move
14 closer to the microphone and make sure that you're speaking
15 into it as you see me doing, please.

16 THE WITNESS: Okay.

17 THE COURT: Thank you.

08:39AM 18 Q. (BY MR. RICHARD:) And you're aware that
19 representatives of Whittaker and the water agencies have been
20 meeting on a monthly basis to discuss technical issues since at
21 least 2008?

22 A. That is correct.

23 Q. And you sometimes attend those meetings at least by
24 phone?

08:39AM 25 A. Sometimes.

1 Q. And do you routinely read correspondence regarding
2 the Whittaker site to or from the California Department of
3 Toxic Substances Control?

08:39AM 4 A. I receive such correspondence from time to time, and
5 I do read it.

6 Q. And when you say "from time to time," is it your
7 practice to read all of the correspondence to or from DTSC
8 that's brought to your attention?

9 A. Yes.

08:39AM 10 Q. And do you also review reports from Whittaker's
11 consultant, CDM Smith?

12 A. No. I'm -- I'm not always privy to those reports.

13 Q. Okay. Do you know who CDM Smith is, sir?

14 A. Yes.

08:40AM 15 Q. Okay. And have you read cover letters to any of the
16 reports over the last ten years?

17 A. If they are sent to me, I will look at them. I
18 probably won't read them all. Usually the reports from the
19 consultants are quite lengthy.

08:40AM 20 Q. And you know Matt Stone, general manager of the
21 water agency; correct?

22 A. Yes.

23 Q. And you recall that in 2018, Mr. Stone on behalf of
24 the water agency asked you and Whittaker to take responsibility
08:40AM 25 for all past and future costs to treat for perchlorate and

1 other contaminants in their wells?

2 MR. GALLAGHER: Objection, Your Honor. Assumes
3 facts.

4 THE COURT: Sustained as framed.

08:40AM 5 Q. (BY MR. RICHARD:) Do you recall correspondence from
6 Mr. Stone seeking to have Whittaker in early 2018 take
7 responsibility for contamination in any of the wells?

8 A. I recall the correspondence. I'm not sure the words
9 were "take responsibility." But there were various matters
08:41AM 10 discussed in the letter.

11 Q. Okay. So you do recall the letter from March 2018?

12 A. Yes, I do.

13 Q. Well, then, why don't we take a look at that. I
14 believe it's Exhibit 26.

08:41AM 15 And this is a letter -- if we can enlarge the
16 "to/from" up there. This is an e-mail attaching a letter, and
17 this is March 19th, 2018. Do you see that?

18 A. I do.

19 Q. And your address at that time was
08:41AM 20 Eric.Lardiere@Meggitt.com; is that right?

21 A. Correct.

22 Q. And this is a letter -- or the e-mail is cc'd to a
23 number of people. You mentioned Mr. Stone, general manager of
24 the water agency. The other folks there, Tim Simpson and
08:42AM 25 Hassan Amini, those are consultants to Whittaker; is that

1 right?

2 A. Yes.

3 Q. If we look at the attached letter from Mr. Stone,
4 the next page -- do you have that there? Do you see that on
08:42AM 5 the screen?

6 A. Yes.

7 Q. And he's writing to you pursuant to a settlement
8 agreement, notifying you, in the first paragraph there, quote,
9 "We are notifying you of the recent perchlorate detection at
08:42AM 10 Saugus Formation Production Well V-205 that exceeded the
11 perchlorate MCL." Do you see that?

12 A. Yes. There's a reference to the settlement
13 agreement that we had entered into with Castaic Lake Water
14 Agency previously.

08:43AM 15 Q. And is it fair to say, when you received this letter
16 in March 2018, you understood that the water agency was
17 identify -- was giving you notice that they had detected
18 perchlorate in one of the wells at issue in this case?

19 A. Yes.

08:43AM 20 Q. And did you understand, when you received this
21 letter and read it, that the water agency was asking Whittaker
22 to reimburse the agency for all past and future costs to treat
23 perchlorate?

24 A. That is one of the requests in the letter, to
08:43AM 25 reimburse for past and future costs.

1 Q. Okay. And for perchlorate and other contaminants;
2 is that right?

3 A. That's what it says.

08:43AM

4 Q. And you understood that Mr. Stone was, as he says
5 later in the letter towards the bottom, second-to-the-last
6 paragraph, "The settlement agreement also requires that SCVWA
7 meet and confer in good faith with Whittaker, negotiate a
8 resolution of the Well 205 contamination issues. Please
9 provide Steve Cole with dates and times that Whittaker and are
10 available to meet to discuss the resolution of this matter."

08:44AM

11 Do you recall that invitation at that time?

12 A. Yes. There was a procedure for Whittaker and a
13 third party to meet with the water agency.

08:44AM

14 Q. So I asked you a minute ago if the water agency was
15 asking Whittaker to take responsibility for contamination in
16 this well, and you correctly pointed out that Mr. Stone didn't
17 use those precise words. But was that your understanding at
18 the time, that Whittaker was -- that Whittaker was being asked,
19 in fact, to take responsibility for the contamination and
20 provide treatment at Well V-205?

08:44AM

21 A. Well, the letter speaks for itself. It was a
22 request for cost reimbursement.

23 Q. Okay. And is it fair to say that you understood
24 that the water agency was asking Whittaker to take
25 responsibility for the contamination in this particular well,

08:45AM

1 Well V-205?

2 MR. GALLAGHER: Objection, Your Honor. Asked and
3 answered.

4 THE COURT: Sustained. It's also vague.

08:45AM 5 Q. (BY MR. RICHARD:) And you discussed this letter
6 with the other folks who received it who worked for Whittaker,
7 Tim Simpson and Hassan Amini. Is that fair?

8 A. Tim Simpson and Hassan Amini are independent
9 environmental consultants. They do perform work for Whittaker.
08:45AM 10 They're not employees. And I did discuss this with
11 Mr. Simpson.

12 Q. And Mr. Simpson's worked with you for what? 14 or
13 15 years?

14 MR. GALLAGHER: Excuse me, Your Honor. I don't mean
08:45AM 15 to interrupt. There's a witness in the courtroom that should
16 not be here.

17 THE COURT: There is an exclusionary order for
18 witnesses. So I'm counting on counsel to make sure that
19 they're aware of who's in the courtroom and, if there is a
08:46AM 20 witness, to make sure that they leave the courtroom. So if you
21 are a witness in this matter, please make sure that you leave.
22 Thank you.

23 MR. RICHARD: Thank you, Your Honor.

24 Q. (BY MR. RICHARD:) So is it fair to say that you've
08:46AM 25 worked with Mr. Tim Simpson on issues related to contamination

1 at the Whittaker site for the last 14 or 15 years?

2 A. Probably been -- been a bit longer than that. I
3 can't remember exactly when I first met Tim.

08:46AM 4 Q. Okay. And -- so you received this letter from the
5 water agency. It's general manager, Mr. Stone, this
6 Exhibit 26, in March 2018. You understand he's asking
7 Whittaker, pursuant to an agreement, to pay for treatment
8 costs.

08:47AM 9 Is it fair to say you understood what was entailed
10 in a treatment system, at least in general, for removing
11 perchlorate from contaminated well water at this time?

12 A. There had been treatment systems for perchlorate
13 installed at plaintiff's water wells over time, and I was
14 familiar with those systems, yes.

08:47AM 15 Q. And in the last sentence of the first paragraph of
16 Exhibit 26, we see a reference to the last line, "Management
17 Policy 97-005, for direct domestic use of extremely impaired
18 sources." Do you see that?

08:48AM 19 A. I -- I see some of the words. I don't see the full
20 sentence, but there's -- there's -- it's up at the top of the
21 screen.

22 Q. Okay. Now we see the full sentence.

23 Is that fair?

24 A. Yes, I see that.

08:48AM 25 Q. Okay. And my question is Mr. Stone's letter in

1 March 2018 wasn't the first time you had heard of something
2 called 97-005, was it?

3 A. I had heard references to it. I don't think I've
4 ever seen it, but I've heard references to it, yes.

08:48AM 5 Q. And this was the first time you had heard that the
6 wells were considered and deemed by the Division of Drinking
7 Water to be extremely impaired sources of water. Is that fair?

8 A. I don't recall when I first heard about extremely
9 impaired sources. I had heard of the Policy No. 97-005.

08:48AM 10 Q. So you received this -- is it fair to call this
11 formal correspondence from Mr. Stone, the general manager of
12 the water agency?

13 A. I would not use the word "formal." It is a letter,
14 and it's pursuant to a settlement agreement.

08:49AM 15 Q. Did you think it was important to respond to
16 Mr. Stone?

17 A. Yes.

18 Q. And after you discussed this letter with
19 Mr. Simpson, at least, you did not provide a response to

08:49AM 20 Mr. Stone; isn't that correct?

21 A. Personally, I did not. I relied upon Mr. Simpson
22 and one of our external attorneys to handle this
23 correspondence.

24 Q. So you yourself did not send an e-mail or a letter
08:49AM 25 back to Mr. Stone. Is that what you're saying?

1 A. No. My only contact with Mr. Stone was a very brief
2 conversation at a stakeholder meeting in July.

3 Q. So between March and May 2018, you did not provide
4 any response to the letter we've been talking about,
08:50AM 5 Exhibit 26.

6 Is that fair?

7 MR. GALLAGHER: Objection, Your Honor. Asked and
8 answered.

9 THE COURT: It's vague. So when you say "you," it's
08:50AM 10 vague. And on that basis, I'm sustaining the objection.

11 MR. RICHARD: Thank you, Your Honor.

12 Q. (BY MR. RICHARD:) You say you ran into Mr. Stone in
13 July. Is that what you said?

14 A. I saw Mr. Stone at a -- I call it a stakeholder
08:50AM 15 meeting. I think it had -- it's a -- it's a task force
16 meeting, which is one of our regular series of task force
17 meetings at the Santa Clarita City Hall. It's a public
18 meeting. It's a -- like this courtroom, it has participants
19 and -- and attendees.

08:50AM 20 Q. Did anyone on behalf of Whittaker respond to
21 Mr. Stone of the water agency in March 2018, to the best of
22 your memory?

23 A. Our consultant, Mr. Simpson, discussed this matter
24 at a March 8 technical meeting with representatives of the
08:51AM 25 agency. I was not present, and I don't know if Mr. Stone was

1 present.

2 Then one of our attorneys spoke with one of the
3 agency's attorneys in early June about this -- this notice.
4 And then, as I mentioned, I had just a brief conversation with
08:51AM 5 Mr. Stone, not substantive, though.

6 Q. So my question was whether anyone from Whittaker
7 responded to Mr. Stone in March 2018, and you said that
8 Mr. Simpson discussed the letter -- or the matter on March 8th.
9 You would agree that March 8th is 11 days before Mr. Stone's
08:52AM 10 letter?

11 A. No. If I said March, I misspoke. It's May. May 8.
12 There's a technical meeting. Well V-205 was on the agenda.
13 Mr. Simpson told the representatives of the agency that we --
14 we needed more time to review the letter. And -- and I think
08:52AM 15 they also -- well, I know -- I only know what Mr. Simpson has
16 told me about that meeting. I wasn't present, so I shouldn't
17 testify as to what was said.

18 Q. Okay. Let's try to go step by step, sir. I'm just
19 asking about March 2018.

08:52AM 20 A. Yes.

21 Q. You've told us that you didn't personally respond to
22 Mr. Stone. And so my question is: To the best of your memory,
23 did anyone from Whittaker respond to Mr. Stone in March 2018
24 regarding his letter? So we're focused on March 2018, not May,
08:52AM 25 June, or July. Okay?

1 A. No. So I'm focused on Mr. Stone. So you're asking
2 directly to Mr. Stone.

3 I don't believe anyone spoke directly to Mr. Stone,
4 unless he attended one of the technical meetings that began on
08:53AM 5 May 8, 2018, and they follow monthly.

6 And then I had one brief conversation with Mr. Stone
7 at a July task force meeting. But -- but, otherwise, there
8 were responses to the agency, not just Mr. Stone, by
9 Mr. Simpson and by one of our attorneys to the agency's
08:53AM 10 attorney.

11 Q. Sir, I understand that eventually Whittaker
12 responded to this letter.

13 My question is: Can you tell the jury upon your
14 oath that anyone from Whittaker responded to Mr. Stone or the
08:53AM 15 water agency in March 2018?

16 A. The water agency in March 2018, no. To Mr. Stone
17 in -- in March 2018, no.

18 Q. Thank you.

19 And in April 2018, did anyone from Whittaker provide
08:53AM 20 any written response to the water agency regarding Exhibit 26?

21 A. I don't know. I -- I doubt it. I'm not aware of
22 it.

23 Q. You are aware that Mr. Stone wrote to you seven
24 weeks after he sent you the letter in March to tell you that he
08:54AM 25 had not yet received a response to his letter. Do you recall

1 that?

2 A. Yes. On May 8, the same day as the technical
3 meeting, at which time Mr. Simpson told the agency
4 representatives that we needed more time to respond to the
08:54AM 5 letter, I received an e-mail a few hours later from Mr. Stone,
6 asking me to respond to -- to this letter.

7 Q. Okay. Why don't we look at Exhibit 45.

8 MR. RICHARD: That is the subject of a stipulation,
9 Your Honor.

08:54AM 10 (Exhibit 45 received into evidence.)

11 Q. (BY MR. RICHARD:) And you see here this is an
12 e-mail from the same Matt Stone, general manager of the water
13 agency, who had sent you the letter in March that we have been
14 talking about. And this is an e-mail May 8th, 2018. Do you
08:55AM 15 see that?

16 A. I do.

17 THE COURT: For the record, 26 is received.

18 MR. RICHARD: Thank you, Your Honor.

19 (Exhibit 26 received into evidence.)

08:55AM 20 Q. (BY MR. RICHARD:) And so he writes to you, "Dear
21 Mr. Lardiere, Eric, to date we have received no response to our
22 March 19th notification confirming perchlorate detections at
23 Well V-205 sent seven weeks ago, nor indication that you have
24 complied with the requirements of the settlement agreement in
08:55AM 25 this matter," period, close quote.

1 Is it correct that there was no response to his
2 letter in March 2018, sir?

3 A. No.

08:55AM

4 Q. So when you received an e-mail from Mr. Stone that
5 you're telling the jury you thought had began with a false
6 statement, did you e-mail him back at his e-mail address and
7 say, "Sorry, Matt, you got this wrong, we did respond"?

08:56AM

8 A. Well, I didn't presume to correct him. But there --
9 I had received an e-mail from Mr. Simpson that day telling me
10 that he had told the team that we needed -- "the team" being
11 the agency team -- that we needed more time to respond.

08:56AM

12 So I don't know, you know, when, you know, anybody
13 talked to Mr. Stone about that meeting or if they had -- I --
14 I -- I didn't -- no. I didn't correct his e-mail. I assumed
15 that -- well, I answered.

16 Q. Did you forward Mr. Simpson's e-mail to Mr. Stone
17 and say, "Matt, we're working on it"?

18 A. No.

08:56AM

19 Q. Is it a correct statement, when he says at the end
20 of that first paragraph, "Further, we have not heard from you
21 regarding dates to meet and confer, which we requested"? Do
22 you think that statement was also false, or do you think maybe
23 that one was true?

24 A. No. That one is true.

08:57AM

25 Q. And was it a few months after this May 8th, 2018,

1 e-mail that the water agency filed the lawsuit against
2 Whittaker?

3 A. I believe the water agency sued Whittaker in mid or
4 early August.

08:57AM 5 Q. 2018?

6 A. Correct.

7 Q. After the March and May attempts to sit down and try
8 to resolve it?

9 A. Well, I mentioned that there was a conversation in
08:57AM 10 June between counsel for the water agency and counsel for
11 Whittaker to discuss the request for -- and I'll be specific
12 here -- for this meeting. And I don't want to go further into
13 that. I gather that there had been some orders from the Court
14 on that. But there was a discussion directly between our
08:58AM 15 counsel and your counsel.

16 Q. And when the lawsuit arrived -- by the way, general
17 counsel means you're an attorney for the company; is that
18 right?

19 A. Correct.

08:58AM 20 Q. And so when this lawsuit arrives in, you recall,
21 August 2018, did you -- did you read it? Did you take a look
22 at it?

23 A. I did.

24 Q. And that suit included the contaminants TCE and PCE,
08:58AM 25 also sometimes referred to as VOCs. Is that a fair statement?

1 A. Correct.

2 Q. And by March 2018, was it -- who was calling the
3 shots in terms of how to respond to that lawsuit? You or folks
4 at Meggitt?

08:59AM 5 A. There was no lawsuit pending in March 2018.

6 Q. I'm sorry. In 2018, by the end of 2018, there was a
7 lawsuit pending?

8 A. The lawsuit was filed in August 2018, yes.

9 Q. Right.

08:59AM 10 And so at that point, was it you or Meggitt who was
11 calling the shots in how to respond to that?

12 A. Whittaker Corporation is an independent corporation
13 from Meggitt USA.

14 Q. And what's Meggitt USA? That's the holding company
08:59AM 15 for another Meggitt company?

16 MR. GALLAGHER: Objection, Your Honor. Relevance.

17 THE COURT: I'm going to allow just a little bit of
18 this.

19 You can answer that question, but that will be it.

08:59AM 20 THE WITNESS: Yes. Meggitt USA, Inc., is a holding
21 company.

22 Q. (BY MR. RICHARD:) Right. And my question is for
23 another Meggitt entity, The Meggitt Group.

24 A. Meggitt USA, Inc., is a holding company for
09:00AM 25 subsidiaries of Meggitt USA in the United States. One of those

1 subsidiaries, a wholly-owned subsidiary is Whittaker
2 Corporation. There are others.

3 Q. Okay. Thank you.

4 And you were in court last Wednesday and you heard
09:00AM 5 your attorney tell the jury several times that Whittaker,
6 quote, "accepts the responsibility for the perchlorate
7 contamination," close quote, in my client's drinking water
8 wells. Do you recall that?

9 A. Yes.

09:00AM 10 Q. More than one time he said, quote, "We are
11 responsible for the perchlorate contamination." Do you recall
12 that?

13 A. I don't recall his exact words, but the gist of it,
14 yes.

09:00AM 15 Q. And was the gist of it correct?

16 A. Yes.

17 Q. And your lawyer also told the jury that the water
18 agency would rather litigate than investigate. Do you recall
19 those comments?

09:00AM 20 A. I heard him say that, yes.

21 Q. But you've been with Whittaker and Meggitt USA long
22 enough to know that Whittaker refused to take responsibility
23 for that perchlorate contamination until it was sued and a
24 federal judge ruled against Whittaker; isn't that correct?

09:01AM 25 MR. GALLAGHER: Objection, Your Honor.

1 Argumentative. Assumes facts. Lacks foundation.

2 THE COURT: Overruled.

3 THE WITNESS: So you're referring here to the 2001
4 lawsuit against Whittaker?

09:01AM 5 Q. (BY MR. RICHARD:) Yes. I believe it was actually
6 late 2000, but we'll call it the 2001 lawsuit.

7 Do you recall that lawsuit?

8 A. I do.

9 Q. And it's correct that, after that lawsuit was filed,
09:01AM 10 you were -- you had already been with Whittaker for half a year
11 or more?

12 A. Yeah. I joined in April. I think the lawsuit came
13 in, like, November.

14 Q. Okay.

09:01AM 15 A. Whenever that was.

16 Q. And the lawsuit was filed three years after the
17 water agencies discovered perchlorate in their wells. Do you
18 recall that?

19 A. I recall the facts slightly differently, but it's
09:02AM 20 just based on things that I read. I can tell you my
21 understanding if you want.

22 Q. Okay. Fair to say it was more than two years after
23 perchlorate was detected in their wells that the lawsuit was
24 filed?

09:02AM 25 A. The water agencies, I don't believe, were the ones

1 that did the sampling of the water wells for the agency.

2 My understanding is the State of California sampled
3 water wells throughout the state, and plaintiff's Wells S-1 and
4 S-2 were amongst those wells and that the State of California
09:02AM 5 determined that there were detections of perchlorate in those
6 wells at the time -- and this is just my understanding -- there
7 hadn't been a level set yet by any governmental entity,
8 including the State, as to what is -- for want of a better
9 word, the contamination level. But they were detecting
09:03AM 10 perchlorate in the plaintiff's wells.

11 Q. And is it fair to say that, even after the water
12 agencies sued Whittaker, Whittaker denied any liability for the
13 perchlorate contamination?

14 MR. GALLAGHER: Objection, Your Honor. Relevance.

09:03AM 15 THE COURT: Overruled.

16 THE WITNESS: Well, we settled, eventually, the
17 case. So I don't think it's fair to say that we denied
18 liability forever.

19 At the beginning of the case, we served an answer
09:03AM 20 which denied the claims for relief, which is a slightly
21 different subject. And one of the claims for relief was under
22 CERCLA as to whether or not perchlorate is a hazardous
23 substance, and there was a ruling by the Court on that issue.
24 I think it was the first ruling in the United States on that
09:03AM 25 issue.

1 So, you know, whether it was even a hazardous
2 substance was in play. I don't think the State of California
3 even decided that issue until about 2008. And I don't think
4 U.S. EPA has actually done it yet.

09:04AM

5 So we denied the CERCLA claim. We also asserted
6 that there were other sources of perchlorate in the Santa Clara
7 Valley. And we sued one of them that we were able to identify,
8 and we got a substantial settlement out of that -- out of that
9 company. Um --

09:04AM

10 THE COURT: Ask your next question, please.

11 MR. RICHARD: Yes, Your Honor. I didn't want to
12 interrupt the witness.

13 THE WITNESS: I'm sorry.

14 Q. (BY MR. RICHARD:) No.

09:04AM

15 So I understand, Mr. Lardiere, that you didn't
16 deny -- Whittaker didn't deny taking responsibility forever was
17 the term you used. So I'll ask my question.

18 Did Whittaker take responsibility, from your
19 perspective, in 2001 or 2002 or 2003?

09:04AM

20 A. Whittaker entered into an interim settlement with
21 the agency in 2003.

22 Q. Okay. And that was after a federal judge ruled
23 against Whittaker on the major issues in that case. Is that
24 fair?

09:04AM

25 A. There was a summary judgment entered by Judge Matz

1 of this court that perchlorate, because it is ignitable,
2 constituted a hazardous substance under CERCLA, and that was
3 enough to establish that element of the claim for relief.

09:05AM 4 Q. Okay. But I just want to get the timing right. You
5 said that there was an interim settlement agreement in 2003.
6 That was after a federal judge ruled against Whittaker on some
7 of the issues in that case. Is that fair?

8 A. On that issue, there was a ruling, and the interim
9 settlement came after that.

09:05AM 10 Q. Thank you.
11 And then there were a number of -- the 2003 and then
12 another partial agreement in 2005, and eventually there was an
13 agreement in 2007. Is that generally correct?

09:05AM 14 A. I remember the 2003 agreement. Quite a bit of money
15 was paid for that. I don't recall the 2005 agreement.
16 That's -- I'm sorry. I just don't recall it. I think the
17 final consent agreement was entered by the Court in 2007.

09:06AM 18 Q. Okay. And at that point, Whittaker took
19 responsibility for some of the perchlorate contamination in
20 2007?

21 MR. GALLAGHER: Misstates prior testimony.

22 THE COURT: You may answer.

23 Overruled.

09:06AM 24 THE WITNESS: The settlement agreement covered
25 specific wells and certain other wells to be built that would

1 be funded under the settlement agreement. So when I say
2 "specific wells," I'm talking about the costs of installation
3 of pipelines and wellhead treatment systems and other stuff.

09:06AM 4 Q. (BY MR. RICHARD:) So even after it entered into
5 that 2000 settlement agreement with the water agencies, after
6 that ruling from a federal judge against Whittaker, Whittaker
7 delayed and disputed its obligations under even that settlement
8 agreement, leading to more litigation. Isn't that generally
9 correct?

09:07AM 10 MR. GALLAGHER: Objection. Vague and ambiguous and
11 argumentative.

12 THE COURT: Sustained.

13 THE WITNESS: So there --

14 THE COURT: I sustained the objection.

09:07AM 15 THE WITNESS: I'm sorry. I didn't hear you.

16 Q. (BY MR. RICHARD:) I'll be more specific.

17 Do you recall that, even after Whittaker entered
18 into an agreement in 2007 with the water agency to pay for
19 treatment to remove perchlorate from contaminated wells, there
09:07AM 20 were a number of disputes between the parties after 2007
21 regarding that agreement?

22 A. Yes.

23 Q. And let's start with containment. You know what a
24 containment study is in general; correct?

09:07AM 25 A. I have a nontechnical understanding, yes.

1 Q. Isn't that one way that the water agency in this
2 case looks at data to see how well the wells are containing a
3 contamination plume? Is that generally correct?

4 A. Yes. We were told that the -- the water agency had
09:07AM 5 performed a containment study by a consulting firm named Todd.

6 Q. And Whittaker, at your direction, sir, wouldn't even
7 pay for a containment study required under its agreement with
8 the water agencies; isn't that correct?

9 A. I don't recall that issue as being disputed.

09:08AM 10 Q. You don't recall that earlier this year you
11 testified in another proceeding just four or five months ago in
12 which the containment study costs were one of the issues?

13 A. Uh, I think we're talking about two different
14 things. There was a containment study that was prepared by
09:08AM 15 Todd, and I think the -- I can't remember, honestly. There was
16 a dispute -- pursuant to the agreement, we have an arbitration
17 provision. And there was a dispute regarding certain costs
18 that the agency was seeking.

19 Q. All right.

09:09AM 20 A. I think one of those costs could have -- it was a
21 study, for sure. I can't recall if it was a containment study.
22 But that was, I think, not the same as the Todd study I just
23 mentioned.

24 Q. Okay. The -- you recall that the water agency
09:09AM 25 wanted to update its investigation and have Whittaker pay for

1 an updated containment study as required under the 2007
2 settlement agreement. Do you generally recall that, sir?

3 A. I have actually forgotten that issue.

09:09AM 4 Q. Okay. Do you recall that Whittaker was ordered to
5 pay for that containment study after the arbitration in which
6 you and Mr. Simpson testified earlier this year?

7 MR. GALLAGHER: Objection, Your Honor. Asked and
8 answered.

9 THE COURT: Overruled.

09:09AM 10 THE WITNESS: We lost the arbitration.

11 Q. (BY MR. RICHARD:) And then Whittaker -- or rather,
12 Meggitt paid for, among other things, the cost of a containment
13 study; is that correct?

14 A. Not Meggitt.

09:10AM 15 MR. GALLAGHER: Objection, Your Honor. Relevance.

16 THE COURT: Sustained.

17 Rephrase your question. Well, state another one.

18 MR. RICHARD: Yes, Your Honor.

09:10AM 19 Q. (BY MR. RICHARD:) Let's talk about Well V-201. Do
20 you recall that well was shut down in about 2011 due to
21 perchlorate contamination?

22 A. I'm not sure of when it was shut down. I know it
23 was shut down for a certain amount of time, yes.

09:10AM 24 Q. Okay. You were here when Mr. Abercrombie testified
25 last week?

1 A. I was.

2 Q. You don't have any reason to tell the jury that the
3 well was not shut down in late 2010 or 2011 due to perchlorate
4 contamination, do you?

09:10AM 5 A. I don't recall him testifying, and I don't have any
6 reason to doubt it as far as the date. I just don't know the
7 date.

8 Q. And isn't it true that Whittaker didn't step up in
9 2011 and take responsibility for that perchlorate contamination
09:11AM 10 in that well even though you had an agreement that identified
11 that well as one of the wells for which Whittaker agreed to
12 take responsibility?

13 A. The --

14 MR. GALLAGHER: Argumentative, Your Honor.

09:11AM 15 THE COURT: Sustained.

16 Q. (BY MR. RICHARD:) Is it fair to say that Whittaker
17 did not agree to pay for perchlorate treatment for Well V-201
18 at any point in 2011 or 2012?

19 MR. GALLAGHER: Lacks foundation.

09:11AM 20 THE COURT: Overruled.

21 You can answer if you know.

22 THE WITNESS: Well, we did eventually agree. We
23 entered into a settlement agreement in 2001 that, um, provided
24 for the reuse of treatment vessels from Well Q-2, which is a
09:11AM 25 different well, that were no longer needed because Well Q-2

1 detections had gone down below the minimum contaminant level.

2 MR. RICHARD: I think we're straying from the
3 question, Your Honor.

4 THE WITNESS: I think I'm trying to answer it,
09:12AM 5 but -- okay. Sorry.

6 THE COURT: And this is largely nonresponsive. It's
7 stricken.

8 The jury is to disregard it.

9 Ask your question, please.

09:12AM 10 MR. RICHARD: Thank you, Your Honor.

11 Q. (BY MR. RICHARD:) For Well V-201, after it was shut
12 down, isn't it true that Whittaker did not agree to pay for
13 perchlorate treatment, that is, treatment to remove the
14 perchlorate, in either 2011 or 2012 or 2013 or 2014? Isn't
09:12AM 15 that true?

16 MR. GALLAGHER: Argumentative. Lacks foundation.

17 THE COURT: Overruled.

18 THE WITNESS: I don't recall the date of our
19 agreement on --

09:12AM 20 Q. (BY MR. RICHARD:) Okay.

21 A. -- Well V-201.

22 Q. But you recall that, eventually, some number of
23 years later, Whittaker eventually agreed to take responsibility
24 and pay for treatment at that well that had been shut down?

09:13AM 25 A. Yes. Whittaker and the agency entered into an

1 agreement to take care of the costs of the installation of the
2 treatment system at Well V-201.

3 Q. Do you recall that Whittaker did that after a call
4 to you personally from the general manager of Castaic Water,
09:13AM 5 one of the water agencies, Dan Mesnada, on Christmas Eve 2014?
6 Do you recall that conversation?

7 A. Well, no, I don't.

8 Q. Okay. You know who Dan Mesnada is?

9 A. Yeah, I do.

09:13AM 10 Q. Okay. You spoke to him from time to time?

11 A. I did. I did.

12 Q. And so you're not denying that he called you on
13 Christmas Eve 2014 imploring you to have Whittaker step up so
14 they could get treatment and get that well running again? You
09:13AM 15 don't deny that, do you?

16 MR. GALLAGHER: Argumentative. Assumes facts.

17 THE COURT: Sustained.

18 Q. (BY MR. RICHARD:) Sir, you're just saying you don't
19 recall one way or the other whether Mr. Mesnada called you on
09:14AM 20 Christmas Eve 2014. Is that fair?

21 A. I don't recall such conversation, no.

22 Q. Did Mr. Mesnada say, in effect, in a conversation in
23 December 2014 regarding Well V-201 that had been shut down for
24 several years at that point due to perchlorate contamination,
09:14AM 25 "Eric" -- and I'm just -- words to the effect, "poop or get off

1 the pot"?

2 MR. GALLAGHER: Argumentative. Lacks foundation.

3 THE COURT: Overruled.

4 Just to -- if it refreshes your memory, since it's
09:14AM 5 particularly colorful, as to having that conversation.

6 THE WITNESS: I -- I don't recall it. It could have
7 happened, though.

8 Q. (BY MR. RICHARD:) All right. Sounds like something
9 Mr. Mesnada might say. Is that fair?

09:14AM 10 A. I don't -- I wouldn't put words in his mouth.

11 Q. Okay. Do you recall that Mr. Mesnada sent you a
12 letter in December, a couple of days before Christmas, of an
13 intent to initiate another arbitration if Whittaker didn't take
14 responsibility for the perchlorate contamination at Well V-201?

09:15AM 15 A. I don't recall the letter.

16 Q. Okay. Wasn't there another dispute when Whittaker
17 refused to pay for replacement water when one of the wells was
18 destroyed, a well near Magic Mountain Parkway?

19 MR. GALLAGHER: Argumentative. Assumes facts.

09:15AM 20 Lacks foundation.

21 THE COURT: Sustained.

22 Q. (BY MR. RICHARD:) Do you recall that there was
23 another issue between Whittaker and the water agencies
24 regarding a well near Magic Mountain Parkway?

09:15AM 25 MR. GALLAGHER: Vague.

1 THE WITNESS: I wouldn't characterize --

2 THE COURT: Overruled.

3 You can answer.

4 THE WITNESS: I wouldn't characterize the dispute

09:15AM 5 quite that way. There was a dispute over a change in the well
6 locations for some large replacement wells that Whittaker had
7 agreed to pay for.

8 Under the 2007 agreement, the agency wanted to move
9 the location from an area that was -- west of Magic Mountain,
09:16AM 10 west of the 405 Freeway to an area that was closer to -- or on
11 the other side of the freeway, closer to the site. There was
12 this -- there was a dispute over this well relocation issue,
13 and that went through a -- a -- the dispute resolution process
14 with an arbitrator, and we settled that one as well.

09:16AM 15 Q. (BY MR. RICHARD:) So you do generally recall that
16 dispute?

17 A. I do.

18 Q. And you recall that the water agency -- you said
19 they wanted to move the treatment system or the well. Isn't it
09:16AM 20 true that they could not obtain an easement from a property
21 owner? Do you recall that aspect of the dispute?

22 A. Well, these were new wells. They were replacement
23 wells. And there was an issue regarding the well site that
24 they had designated as part of the settlement agreement. And,
09:17AM 25 you know, our concern -- well, sorry. I think I've answered

1 the question.

2 Q. Okay. And my question is -- you're correct, there
3 was an issue with the replacement well. But do you also recall
4 there was an issue not with the water agency wanting to place
09:17AM 5 the replacement well somewhere else but they had to because
6 they couldn't get an easement from the property owner? Do you
7 recall that aspect of the dispute?

8 A. What I recall is probably not completely accurate
9 over this many years. But I recall there was an issue with the
09:17AM 10 ability of the agency to locate the wells and the pipelines
11 that were part of the replacement well project where they
12 wanted to west of Magic Mountain. I -- I don't recall anything
13 about an easement that -- that's not -- I don't recall that.

14 Q. Okay.

09:18AM 15 A. There was an issue about the -- the property rights
16 to install the wells at that location.

17 Q. Okay. And it's fair to say -- I don't want to spend
18 too much time on this additional dispute. But after the
19 initiation of another arbitration, Whittaker ended up agreeing
09:18AM 20 to pay about \$8 million on that one; is that right?

21 A. We entered into a settlement agreement that had a
22 cap of about \$8 million with some other provisions in it.
23 Maybe it's 9 million. It's somewhere between 8 and 9 million.

24 Q. And do you recall another issue with the water
09:18AM 25 agency -- again, after entering into a 2007 settlement

1 agreement to pay for perchlorate contamination at identified
2 wells, do you recall another dispute regarding costs to
3 rehabilitate the wells at Saugus 1 and Saugus 2?

09:19AM 4 A. There was a procedure for a cost consultant to
5 review disputes over costs between the parties, and we went
6 through the cost consultant procedure regarding the
7 refurbishment of some equipment on the, um, Saugus 1 and
8 Saugus 2 wells.

09:19AM 9 Q. So let's see if we have the chronology right on this
10 one.

11 The water agency requested Whittaker to pay to
12 refurbish the cost to rehabilitate those wells. You go through
13 a cost consultant arbitration or it is at least started, and
14 then Whittaker agrees to pay almost \$3 million on that one?

09:19AM 15 A. I don't recall the amount, but you're right, we did
16 initiate the cost consultant procedure. And parties met, and
17 consultant got the parties to agree to the costs. I don't
18 recall 3 million.

09:20AM 19 Q. Okay. And then just earlier this year, you were
20 involved in the -- another dispute with the water agencies that
21 you alluded to. And in that one, Whittaker actually accused
22 the water agency of breaching the 2007 settlement agreement.
23 Do you recall that?

24 A. I don't.

09:20AM 25 Q. Okay. Do you recall that just five or six months

1 ago Whittaker said it had no obligation to pay for the
2 perchlorate treatment system for the contaminated well,
3 Well Q-2, because the water agency had breached the agreement?

09:20AM 4 A. We already discussed that issue. We had an
5 arbitration over -- maybe I'm mixing it up. There was a --
6 that was the arbitration that I said we lost. It was a dispute
7 over whether Whittaker was required under the settlement
8 agreement to pay for new equipment at Well Q-2 to treat water
9 at that well.

09:21AM 10 Q. And after the -- is it fair to say that the judge
11 rejected Whittaker's claims that the water agency had breached
12 the agreement and rejected all of Whittaker's other excuses.
13 Then Whittaker paid for a perchlorate treatment system, a
14 containment study, as well as replacement water costs?

09:21AM 15 MR. GALLAGHER: Objection, Your Honor.
16 Argumentative.

17 THE COURT: Sustained.

18 THE WITNESS: We complied with the --

19 THE COURT: I sustained the objection.

09:21AM 20 THE WITNESS: Sorry.

21 Q. (BY MR. RICHARD:) It's correct that after you, in
22 your words, lost the arbitration, Whittaker agreed to pay for a
23 perchlorate treatment system at Well Q-2? Is that fair?

24 A. Yes.

09:22AM 25 Q. And part of what Whittaker was ordered to pay

1 earlier this year was replacement water costs of over a million
2 dollars based on the same calculations for Mr. Abercrombie who
3 testified in this proceeding; isn't that correct?

4 MR. GALLAGHER: Assumes facts. Lacks foundation.

09:22AM

5 Calls for speculation.

6 THE COURT: Do you know the answer to this question?

7 Yes or no.

8 THE WITNESS: No.

9 Q. (BY MR. RICHARD:) Do you have any memory that

09:22AM

10 replacement water was one of the issues in that arbitration a
11 few months ago?

12 A. Yes.

13 Q. And you were present when Mr. Abercrombie testified
14 in that proceeding about his calculations?

09:22AM

15 MR. GALLAGHER: Objection, Your Honor. Relevance.

16 THE COURT: Overruled.

17 THE WITNESS: I thought it was Mr. Cole who
18 testified at that arbitration, not Mr. Abercrombie.

19 Q. (BY MR. RICHARD:) Okay. So you don't -- the answer
20 is you don't recall -- or you're not sure that Mr. Abercrombie
21 also testified in that proceeding. Is that fair?

09:23AM

22 A. I don't recall Mr. Abercrombie's testimony in the
23 arbitration. But replacement water was one of the issues.

24 Q. Oh. Okay. And with respect to replacement water,
25 you recall that Whittaker paid about a million dollars for

09:23AM

1 that?

2 A. I don't recall the amount, but we did pay it
3 pursuant to the arbitrator's award.

09:23AM

4 Q. So is that what Whittaker means when it tells the
5 jury that it takes responsibility for perchlorate
6 contamination; that after it's sued or a claim is made or some
7 number of years have gone by, then Whittaker takes
8 responsibility?

09:23AM

9 MR. GALLAGHER: Objection, Your Honor.
10 Argumentative.

11 THE COURT: Sustained.

09:23AM

12 Q. (BY MR. RICHARD:) Sir, would you agree that it
13 would be more accurate to say that Whittaker takes
14 responsibility only if and when the water agency threatens to
15 take the agency -- to take Whittaker to court or arbitration?

16 MR. GALLAGHER: Same objection.

17 THE COURT: Sustained.

18 Next question. Different subject.

09:24AM

19 Q. (BY MR. RICHARD:) As custodian of records and
20 president of Whittaker, isn't it true that, when Whittaker
21 acquired Bermite and made a division of Whittaker, Whittaker
22 acquired the assets and liabilities of Bermite?

23 MR. GALLAGHER: Misstates prior testimony. Assumes
24 facts. Lacks foundation.

09:24AM

25 THE COURT: Sustained.

1 Q. (BY MR. RICHARD:) You recall that Bermite became a
2 division of Whittaker at some point in time?

3 MR. GALLAGHER: Lacks foundation. Calls for
4 speculation.

09:24AM 5 THE COURT: Do you know the answer to the question?

6 THE WITNESS: It's vague as to Bermite.

7 THE COURT: Ask another question, please.

8 MR. RICHARD: Sure.

9 Q. (BY MR. RICHARD:) You told us a few minutes ago
09:24AM 10 that you read the Complaint in this matter. Do you recall
11 that?

12 A. Yes.

13 Q. And you recall that the Complaint in this matter
14 alleged that Whittaker acquired Bermite and Bermite Powder in
09:24AM 15 1967 pursuant to an acquisition agreement?

16 A. I don't recall that allegation from the Complaint,
17 Counsel.

18 Q. Okay. Well, let -- sir, do you recall that in this
19 proceeding, that Whittaker has agreed that it is the -- that it
09:25AM 20 acquired the assets and liabilities of Whittaker-Bermite
21 Corporation and Bermite Powder Company?

22 A. I deny that.

23 Q. I'm sorry. You said what?

24 A. I deny that.

09:26AM 25 Q. You know what an answer to a Complaint is, don't

1 you?

2 A. I do.

3 Q. In response to a specific allegation that

4 Whittaker Corporation is a successor to the assets and

09:26AM

5 liabilities of its predecessor entities, including Bermite and
6 Bermite Powder Company, Whittaker admitted that allegation, did
7 it not?

8 MR. GALLAGHER: Misstates the allegation. Lacks
9 foundation.

09:26AM

10 THE COURT: I'm going to sustain it on lacking
11 foundation.

12 Q. (BY MR. RICHARD:) Okay. So you read the Complaint
13 in this matter; correct?

14 A. Yes.

09:27AM

15 MR. RICHARD: And, Your Honor, may I show the
16 witness a couple of pages from that Complaint that I think are
17 marked as Exhibit 528 or --

18 THE COURT: Before you do so, establish a foundation
19 with respect to the answer.

09:27AM

20 MR. RICHARD: Oh. Very good.

21 Q. (BY MR. RICHARD:) And I think -- you know what an
22 answer to a Complaint is; correct?

23 A. Yes.

24 Q. And as general counsel, you're aware that Whittaker
09:27AM 25 submitted an answer to the Court in response to the Third

1 Amended Complaint in this proceeding; correct?

2 A. Yes.

3 Q. And did you review that answer?

4 A. I don't recall the review.

09:27AM

5 Q. You understand, as you sit here, that the answer
6 admitted the allegations regarding Whittaker acquiring the
7 assets and liabilities of Bermite?

8 MR. GALLAGHER: Assumes facts. Lacks foundation.
9 Misstates the answer.

09:28AM

10 THE WITNESS: Well, I've since --

11 THE COURT: I'm going to overrule the objection.
12 But -- actually, let me ask you a question.

13 THE WITNESS: Sure.

09:28AM

14 THE COURT: You said that you don't recall reviewing
15 the answer. Would you expect, given your practice and given
16 your title, that you would have read the answer in this case?

17 THE WITNESS: Sometimes I don't read what I --
18 sorry. Sometimes I don't read what I receive. I have to be
19 honest about that.

09:28AM

20 THE COURT: But you did receive the answer in this
21 case or you did not or you don't recall?

22 THE WITNESS: I did receive the answer, the draft
23 answer from counsel.

09:28AM

24 THE COURT: All right. I'm going to find -- thank
25 you, sir.

1 I'm going to find there's sufficient foundation in
2 this matter.

3 You can -- ask another question, please.

4 MR. RICHARD: Certainly.

09:28AM 5 Q. (BY MR. RICHARD:) As you sit here, you know that
6 Whittaker admitted in its answer that it acquired the assets
7 and liabilities of Bermite pursuant to that 1967 agreement;
8 right?

09:28AM 9 MR. GALLAGHER: Objection, Your Honor. Asked and
10 answered.

11 THE COURT: Overruled.

12 THE WITNESS: In each claim for relief, which I -- I
13 have looked at the answer since that time, Counsel. In each
14 claim for relief, there is a -- an allegation in the Complaint
09:29AM 15 and a response to that allegation in the answer. And in the
16 answer by Whittaker at the beginning of each claim for relief,
17 Whittaker denies that allegation.

18 Q. (BY MR. RICHARD:) Well, then, let's -- let's go
19 through it briefly.

09:29AM 20 A. Sure.

21 Q. So there was a Third Amended Complaint in this
22 action. Do you recall that, sir?

23 A. I have seen it, yes.

24 Q. Okay. And paragraph 15 states, quote, "Plaintiff
09:30AM 25 has informed and believes and on that basis alleges that

1 Whittaker Corporation is the successor to the assets and
2 liabilities of its predecessor entities. Whittaker's
3 predecessor entities include, but are not limited to, the
4 following companies: Whittaker-Bermite Corporation,
09:30AM 5 Whittaker Porta Bella, Inc., Bermite Powder Company, and
6 Los Angeles Powder Company, collectively referred to with the
7 Whittaker Corporation as," quote, "'Whittaker,'" close quote.
8 That's paragraph 15.

9 And then in the answer that you said you are
09:30AM 10 familiar with, it reads for paragraph 15, quote, "Whittaker
11 admits on information and belief the averments of
12 paragraph 15," period, close quote.

13 Do you recall that's the way it works, there's an
14 allegation in a paragraph and then Whittaker has to admit or
09:30AM 15 deny that?

16 A. The allegation in the paragraph, I do recall that
17 response in the answer. But, as I just stated, there is a
18 repetition of that allegation in the claim for relief. Each
19 claim for relief starts off with a repetition of allegations.
09:31AM 20 And in each case, Whittaker denied the allegations.

21 Q. And paragraph 16 of the Third Amended Complaint
22 alleged, quote, "Plaintiff has informed and believes and on
23 that basis alleges that Whittaker has owned the Whittaker site
24 since at least 1943 and manufactured explosive products at the
09:31AM 25 Whittaker site from 1943 until at least 1987," period, close

1 quote.

2 And Whittaker's answer to that specific paragraph
3 was, quote, "Whittaker admits on information and belief the
4 averments of paragraph 16," period, close quote.

09:31AM

5 Isn't that correct?

6 A. You've left out some words.

7 So the allegation in paragraph 15 has two sentences.

8 The second sentence actually defines the word "Whittaker" to
9 include an entity that never existed, Whittaker-Bermite

09:32AM

10 Corporation. Bermite Powder Company, Los Angeles Powder
11 Company, and one other company, together with Whittaker
12 Corporation in the Complaint, that was all defined to be,
13 quote, "Whittaker."

14 Then in paragraph 16, the one you just read, it
15 alleges that Whittaker, including all of these corporations,
16 owned the property from 1943 to present. And that was admitted
17 on information and belief in the answer.

09:32AM

18 Q. Who's Rene Simmons?

19 A. He is an attorney at Covington & Burling.

09:32AM

20 Q. And before that, he was with Pillsbury; is that
21 right?

22 A. Yes.

23 Q. And you've worked with him for 10, 15 years?

24 A. 20.

09:33AM

25 Q. Okay. Thank you. I stand corrected.

1 And you recall that, when Mr. Simmons was with
2 Pillsbury, he initiated litigation on behalf of Whittaker
3 against the United States of America. Do you recall that?

4 A. He did.

09:33AM

5 Q. And before Whittaker filed a lawsuit in federal
6 court, in this federal court, Central District of California,
7 wouldn't it have been your practice to become familiar with the
8 allegations in that Complaint?

9 A. Yes.

09:33AM

10 Q. And so you recall that in a First Amended Complaint
11 filed in 2013, Whittaker alleged, quote, at paragraph 15,
12 "Whittaker purchased the stock, assets, and liabilities of
13 Bermite in 1967 and owned and operated the site until 1998,"
14 period, close quote.

09:33AM

15 Was that allegation correct when it was in the
16 Complaint filed on behalf of Whittaker in federal court?

17 A. It is correct, although not detailed.

09:34AM

18 So Whittaker acquired the stock of Bermite Powder
19 Company from its stockholders in September 1967. So there are
20 four individual stockholders. Whittaker acquired the stock of
21 Bermite Powder Company from those individuals, shareholders.

09:34AM

22 In October of 1967, Bermite Powder Company, which is
23 still a separate corporation, and Whittaker Corporation entered
24 into an indenture agreement. And the indenture agreement
25 comprised a grant by the grantor, Bermite Powder Company, to

1 the grantee, Whittaker Corporation, of the assets of Bermite
2 Powder Company, both real property and personal property.

3 Q. I think you answered my question. So maybe I'll
4 move to strike everything after "yes."

09:35AM 5 THE COURT: The motion is denied. The answer will
6 stand.

7 MR. RICHARD: Okay.

8 Q. (BY MR. RICHARD:) And just so we're clear, though,
9 the allegation in the Complaint filed by Mr. Simmons on behalf
09:35AM 10 of Whittaker against the United States of America alleging that
11 Whittaker purchased the stock, assets, and liabilities of
12 Bermite, that was a correct allegation at the time it was made
13 in 2013?

14 A. Not quite. It's -- it's oversimplified.

09:35AM 15 As I just testified, Whittaker acquired the stock.
16 And then pursuant to a separate post-acquisition indenture,
17 Whittaker acquired the assets of Bermite Powder Company. So
18 it's -- maybe I'm being too technical. I'm sorry. But it's an
19 oversimplification in the Complaint.

09:36AM 20 Q. That's -- let's move on.

21 We've been talking about perchlorate contamination.
22 And it's your testimony that Whittaker now acknowledges that
23 perchlorate contamination in the water agencies' wells is the
24 responsibility of Whittaker. Did I get that generally correct?

09:36AM 25 A. We have acknowledged in this lawsuit that the

1 allegation that the perchlorate detected in Well 205 is
2 Whittaker's responsibility. We're not disputing liability
3 of -- for that contamination.

09:36AM 4 Q. With respect to other contaminants, you learned
5 shortly after you started with Whittaker over 20 years ago that
6 Whittaker was finding TCE in the soil at the Bermite-Whittaker
7 site; is that correct?

09:37AM 8 A. Yeah. Shortly after I started, I read the remedial
9 investigation of the site by Acton-Mickelson as a consulting
10 firm, environmental. And they had surveyed the site for, among
11 other things, TCE and had found it in the soil at the site.

12 Q. Okay. And fair to say that you learned, for
13 example, that the State Department of Toxic Substances had also
14 detected TCE at the Whittaker site, in particular 1993?

09:37AM 15 MR. GALLAGHER: Calls for speculation.

16 THE COURT: Sustained. Lack of foundation at this
17 point.

18 Q. (BY MR. RICHARD:) Oh, okay.

09:37AM 19 You do recall receiving an order in 2002. You were
20 with Whittaker -- Meggitt USA in 2002; is that correct?

21 A. I was employed by Meggitt USA, and I had a title of
22 vice president, secretary, and general counsel of Whittaker
23 Corporation in 2002. And I did receive an order from the DTSC
24 at the time.

09:38AM 25 Q. Okay. And you recall that one of the facts noted in

1 that order was that DTSC had detected TCE in 1993 at the
2 Whittaker site. Is that fair?

3 A. I do not recall the statement that you just read. I
4 don't recall it.

09:38AM

5 Q. Okay.

6 A. Whatever -- whatever it says, it says.

7 Q. Do you recall learning at some point that Whittaker
8 was also detecting TCE in the groundwater beneath the nearly
9 thousand-acre site?

09:38AM

10 A. My recollection is that Acton-Mickelson had
11 installed five or so groundwater monitoring wells at the site.
12 I -- I don't recall the sample results from those wells.

13 Q. Do you recall that both TCE and PCE were detected in
14 at least an area known as Burn Valley at some point in the
15 '90s?

09:39AM

16 A. I don't recall it.

17 Q. Wasn't there a point in time, say, August 2019, when
18 you concluded that TCE and other contaminants like PCE did not
19 even have the potential to migrate to drinking water supplies,
20 sir?

09:39AM

21 A. I didn't join the company until April of 2020. So I
22 don't know what conclusions the company reached on that subject
23 in 2019.

24 Q. I'm sorry. You were with the company in 2019?

09:39AM

25 A. No. Oh, 2019. I'm sorry.

1 Q. That's all right.

2 A. We've been jumping around. I'm sorry. I thought --
3 I was understanding it -- 2019. Yeah. 20 -- yeah, 2020 --

4 Q. I'll ask it again.

09:40AM

5 A. I'm sorry. I was confusing 1999 with 2019. Can you
6 restate the question again?

7 Q. I have to confess, I sometimes do the same thing.

8 A. You completely threw me off with the "when you
9 became employed." Okay. Go ahead.

09:40AM

10 Q. It was not my intent, sir.

11 Isn't it -- isn't it fair that at some point, while
12 you were with Whittaker -- and I was picking 2019 as a frame of
13 reference --

14 A. Right.

09:40AM

15 Q. -- you concluded that TCE and PCE and other
16 contaminants did not even have the potential to migrate to
17 drinking water supplies?

18 MR. GALLAGHER: Objection. Vague. Overbroad.
19 Lacks foundation.

09:40AM

20 THE COURT: Sustained.

21 Q. (BY MR. RICHARD:) So you learned at some point
22 before 2019 that Whittaker and its consultants and the State of
23 California had detected TCE and PCE in the soil; is that
24 correct?

09:41AM

25 A. In 2019, yes. The site had been very well

1 characterized, and there was -- there had been detections in
2 prior remedial investigations of TCE and PCE in the soil. By
3 2019, the soil would have had -- would have been -- would have
4 gone through a remediation process.

09:41AM

5 So I think generally the answer is there was TCE and
6 PCE in the soil, and then it went through a remediation process
7 to remove those chemicals. I think that's probably the best
8 way to say it.

09:41AM

9 Q. Is it fair to say that as of 2019, you were not
10 entirely sure about PCE being at the site?

11 A. Yeah. PCE, I -- I've -- I wasn't entirely sure
12 about PCE. I had more understanding on TCE.

09:42AM

13 Q. But now you know that -- although you weren't
14 entirely sure even in 2019, now you know, as you sit here
15 today, that PCE, in fact, has been detected throughout the
16 site?

09:42AM

17 A. Oh, I wouldn't say throughout. There were -- there
18 were 34 -- well, approximately 34 acres of the site that had
19 VOC contamination issues, as identified through the remedial
20 investigations. The site is like a thousand acres, so it's
21 like three-and-a-half percent.

09:42AM

22 Q. My question is: In 2019, I think you just told us,
23 you weren't sure if there was PCE at the site. And I'm just
24 asking, as you sit here today, whether it's 34 acres or
25 30 acres, you don't deny that PCE has been detected at the

1 Whittaker site by Whittaker's own consultants?

2 A. Correct. They have detected PCE in soil.

3 Q. Right.

4 And Whittaker's consultants have measured the pounds

09:43AM

5 of both TCE and PCE that they've been removing from the

6 Whittaker site. You're generally aware of that. Is that fair?

7 A. Yes, I am.

8 Q. Okay. And we mentioned the 2002 order. That's

9 Exhibit 1 in these proceedings. And that's an order you've

09:43AM

10 certainly read before today; correct?

11 A. Yes.

12 Q. And if you could look at Exhibit 1. I believe this

13 is already in evidence. And this is the -- what is this, sir?

14 A. Imminent and Substantial Endangerment Determination

09:43AM

15 Order and Remedial Action Order.

16 Q. And this was from the State of California, the --

17 basically the California EPA, Environmental Protection Agency;

18 is that correct?

19 A. I believe the Department of Toxic Substances Control

09:44AM

20 is one of the divisions of the California EPA.

21 Q. And the respondent is Whittaker Corporation; right?

22 A. Correct.

23 Q. And if you could turn to page 4. And this is an

24 order you've read prior to today; right?

09:44AM

25 A. Correct.

1 Q. In fact, you attached it to a declaration you
2 submitted in another proceeding, stating that there was a true
3 and correct copy attached to your declaration. Is that fair?

09:44AM 4 A. I don't know if it's the same copy, but, yes, I
5 attached it to a declaration.

6 Q. Okay. And so certainly by 2002, you've been with
7 Whittaker for a couple of years. You became aware that there
8 was a prior Consent Order between the State of California and
9 Whittaker Corporation?

09:45AM 10 A. Yes, I was aware of that.

11 Q. And we see a reference to that 1994 order in the
12 last sentence of paragraph 1.3 at page 4?

13 A. Correct.

14 Q. Respondent remains subject to Consent Order with
09:45AM 15 respect to the site, effective on or about November 21, 1994.

16 And you've reviewed that Consent Order prior to
17 today?

18 A. Yes.

19 Q. And if we could go to Exhibit 486, which I believe
09:45AM 20 is already in evidence. And Exhibit 1 -- I'm sorry.
21 Exhibit 486, page 1, is a cover letter to Mr. Gordon Louttit of
22 Whittaker Corporation. Do you see that?

23 A. I do.

24 Q. And this is attaching that Consent Order. If we
09:46AM 25 could go to page 4 of the document. This is the Consent Order,

1 sir?

2 A. Yes.

3 Q. And so this is a document that Whittaker Corporation
4 agreed to; correct?

09:46AM 5 A. Correct.

6 Q. And I want to ask you, by 2002, did you have a
7 general understanding that there were two different types of
8 sites that -- from the perspective of the EPA and California
9 EPA, there were two different types of sites regarding
09:46AM 10 potential contamination at Whittaker, something called
11 hazardous waste management units and something called SWMUs,
12 solid waste management units?

13 A. I read the distinction between those two different
14 kinds of units in my review of the Consent Order in the last
09:47AM 15 couple of days. I -- prior to that, I didn't have that
16 understanding.

17 Q. Okay. Well, why don't we look at page 11,
18 paragraph 2.3.2, Hazardous Waste Management Units. Do you see
19 that's the title of this section of 486?

09:47AM 20 A. Correct.

21 Q. And then in -- you were here in court last Friday
22 when Mr. Blum asked the witness about this page of this
23 document?

24 A. I was here in court. I don't -- I don't recall the
09:47AM 25 examination on this page.

1 Q. Okay. Paragraph 2.3.2.2 says, quote, "From
2 August 15th, 1983, to November 30th, 1983, respondent filed
3 three letters with the department describing closure activities
4 of the interim status hazardous waste management units which
09:48AM 5 had been completed without an approved closure plan."

6 And my first question is: Is that generally a
7 correct statement, that Whittaker in the early '80s closed
8 certain hazardous waste management areas without an approved
9 closure plan from the State of California?

09:48AM 10 MR. GALLAGHER: Objection, Your Honor. Lacks
11 foundation. Calls for speculation.

12 THE COURT: Sustained.

13 Q. (BY MR. RICHARD:) If we go down to the next
14 paragraph, paragraph 2.3.2.3, it states, quote, "The closure
09:48AM 15 plan has been implemented for all of the hazardous waste
16 management units. 13 of the 14 units were closed by the
17 department."

18 Do you see that?

19 MR. GALLAGHER: Same objection, Your Honor.

09:48AM 20 THE COURT: Sustained.

21 Establish a foundation --

22 MR. RICHARD: Sure.

23 THE COURT: -- first, please.

24 Q. (BY MR. RICHARD:) I think you told us a minute ago,
09:48AM 25 you have reviewed this Consent Order from 1994; correct?

1 MR. GALLAGHER: Misstates his prior testimony.

2 THE COURT: And, Counsel, to be clear on the
3 foundation, if you're asking him to state whether certain facts
4 in this document are true and correct, then you need to
09:49AM 5 establish an appropriate foundation.

6 MR. RICHARD: No, I understand, Your Honor.

7 THE COURT: Okay.

8 MR. RICHARD: Yes. Very good.

9 Q. (BY MR. RICHARD:) My question is: You understood,
09:49AM 10 certainly by 2002, that there were not just 14 areas, 14 units
11 of concern to the State of California that were subject to this
12 Consent Order in 1994; correct?

13 MR. GALLAGHER: Asked and answered.

14 THE COURT: Overruled.

09:49AM 15 You can answer that question.

16 THE WITNESS: Okay. You're asking about my
17 understanding in 2002. And I -- I do not recall having that
18 understanding in 2002.

19 Q. (BY MR. RICHARD:) Okay. If we could turn to
09:50AM 20 page 12.

21 Is it fair to say that at some point during your
22 tenure with Whittaker, you understood that there were some
23 things called hazardous waste management units. And we just
24 talked about 14 of those. And then there was something else
09:50AM 25 called solid waste management units? I think you told us a

1 minute ago you were generally familiar with that distinction.

2 Is that fair?

3 MR. GALLAGHER: Misstates prior testimony, and it
4 was asked and answered.

09:50AM 5 THE COURT: Overruled.

6 THE WITNESS: Right. So I read this document
7 recently. And I saw that distinction in the document recently,
8 my -- while this trial has been going on. So I can see the
9 distinction in the document. I don't recall having had that
10 understanding of there being a distinction at any prior time.

09:50AM

11 Q. (BY MR. RICHARD:) So if we could look at page 13,
12 paragraph 2.3.3.4.

13 A. Okay.

14 Q. There's a reference to an Exhibit 3. Do you see
15 that?

09:51AM

16 A. Yes, I see that.

17 Q. And my question is: Have you seen -- if you jump to
18 page 54 of the document, Exhibit 3 is a list of potential
19 SWMUs. It begins with, No. 1, former Building 317, that 317
20 impoundment. Do you see that?

09:51AM

21 A. Yes.

22 Q. And my question is: Before 2019, were you aware
23 that there were 77 SWMUs -- this runs through page 56 of the
24 document -- mentioning Orofino Canyon, East Fork landfill,
25 Hula Bowl Canyon, and ends with ravine below former

09:52AM

1 Building 236, Item No. 77.

2 Did you understand by at least 2019, that there were
3 not just 14 units of concern but that there were 77 areas
4 called SWMUs, solid waste management units, at the Whittaker
09:52AM 5 site?

6 A. Well, this list starts off with the word
7 "potential," which is what it means, potential SWMUs. And I
8 did read this recently, within the last couple of days. And
9 that's what I know about it. I don't recall having had any
09:52AM 10 understanding of SWMUs -- or SWMUs or however it's
11 pronounced -- prior to that time. I don't recall having that
12 understanding.

13 But I can read the document, I can see this is a
14 list of potential such units.

09:53AM 15 Q. Well, when you started with Whittaker, didn't you
16 understand in April or May or June 2000 that Whittaker was then
17 operating under this Consent Order and was required to
18 investigate these potential areas of contamination?

19 A. Well, um, not exactly. I did understand the Consent
09:53AM 20 Order didn't go away as a result of the sale of the property.
21 But the company had sold the property in -- prior to my time.
22 But I did look at the sale agreement in 1999 to a remediation
23 company called Remediation Financial, Inc. And they, this
24 remediation company, went into their own agreement with the
09:53AM 25 DTSC in, like, 2001, they call it an enforceable agreement.

1 So I did understand under the enforceable agreement
2 that that didn't let Whittaker off the hook. It says that.
3 But, um -- but nevertheless, because that was the performing
4 party at the time, that was the company that was doing the
09:54AM 5 remediation at that time.

6 Q. Did you ever call up the -- your predecessor, the
7 general counsel for Whittaker, Gordon Louttit, and ask him how
8 come Whittaker hadn't completed the remediation and
9 investigation at some point in the '80s or '90s or before the
09:54AM 10 1999 sale?

11 MR. GALLAGHER: Objection, Your Honor. Assumes
12 facts. Lacks foundation.

13 THE COURT: Sustained.

14 Q. (BY MR. RICHARD:) You know who Gordon Louttit was;
09:54AM 15 correct?

16 A. I know who Gordon Louttit was, yes.

17 Q. And it's fair to say that, when you started with
18 Whittaker, you understood that Whittaker had not completed an
19 investigation and remediation, that is, removal of the
09:55AM 20 contamination by 1999? Can we agree on that?

21 A. No, we cannot agree on that.

22 There was a complete -- completed remedial
23 investigation performed by the consultant I mentioned
24 previously, Acton-Mickelson, and that RI -- we call it an RI --
09:55AM 25 it's like 7,000, 10,000 pages, it's huge -- had been completed

1 prior to me joining Whittaker. And that work was done by
2 Whittaker.

09:55AM 3 Now, as far as the remediation, that is true, the
4 remediation of the site was not completed as of my joining
5 of -- with Whittaker.

6 Q. Okay. So it's your testimony that you thought when
7 you started, that the investigation of those 77 solid waste
8 management units had been completed by 1999? Did I hear that
9 right?

09:55AM 10 A. I can't be that precise. There was a completed
11 remedial investigation pursuant to the 1994 order that this is
12 an exhibit to and that had been approved by the DTSC.

13 So whatever was required for that remedial
14 investigation by the Government, they -- they got done. Did it
09:56AM 15 include this list? I don't know that. I -- I would only be
16 making guesses.

17 Q. Well, you -- you certainly knew it by 2002 when you
18 read the order that you just told us about, the Imminent and
19 Substantial Endangerment Determination and Order directed to
09:56AM 20 Whittaker, which attached the same 77 SWMUs; correct?

21 A. I don't recall that from that order. If it's there,
22 it's there.

23 Q. Okay. Why don't we go back to Exhibit 1. If we
24 just go to page 1, I think it's page 70 of Exhibit 1. 1.70.

09:58AM 25 MR. RICHARD: Your Honor, just a moment. I think

1 the parties swapped out Exhibit 1's in their effort to comply
2 with the Court order, and the copy we received apparently
3 didn't have all the pages. So we'll try to remedy that
4 promptly.

09:58AM

5 THE COURT: Can you move on to another subject?

6 MR. RICHARD: Sure, Your Honor. Yes.

7 And I apologize. We had the complete copy up until
8 yesterday.

9 Okay. We'll come back to that.

09:59AM

10 Your Honor, I think we have a hard copy for the
11 witness, the complete copy, because this really is what I'm
12 going to end on. So I can't effectively move on --

13 THE COURT: That's fine.

14 MR. RICHARD: -- without the complete copy. If it's
15 convenient for the witness or we have an extra copy for the
16 witness, to move matters along --

09:59AM

17 THE COURT: I don't know if he has Exhibit 1.

18 Do you, Mr. Lardiere?

19 MR. RICHARD: May we approach to move it along,

09:59AM

20 Your Honor?

21 THE COURT: Let's go ahead and bring him a copy,
22 please.

23 MR. RICHARD: Okay.

24 Q. (BY MR. RICHARD:) Why don't we go to just page 9 in
10:00AM 25 Exhibit 1. I think this was in the copy we were provided.

1 A. The -- the exhibit page 9 or the document page 9?

2 Q. Well, they're the same. So --

3 A. Okay. Got it.

10:00AM 4 THE COURT: It's Exhibit 1.9. So it's page 9, and
5 it also happens to be on the screen.

6 THE WITNESS: Oh, okay. Sorry.

7 MR. RICHARD: Thank you, Your Honor.

8 Q. (BY MR. RICHARD:) And so I wanted to ask you about
9 something we talked about a minute ago. If you look at the
10:00AM 10 first paragraph at page 9, paragraph 2.5, Hazardous Waste
11 Substances and/or Constituents Found at the Site.

12 And this 2002 order, which, correct me if I'm wrong,
13 you read this order back in 2002, among other times; correct?

14 A. I did read it in 2002.

10:01AM 15 Q. Thank you.

16 And so you would have noted where it says, quote,
17 "In 1993, DTSC conducted a sampling investigation of selected
18 portions of the site. Soil samples were taken from trenches
19 excavated in the Burn Valley portion of the site and near the
10:01AM 20 former lead azide HWMU." PCE was detected in one sample from
21 the Burn Valley at 92,000 milligrams per kilogram. Do you see
22 that?

23 A. I see it.

24 Q. And again, your own consultants confirmed that there
10:01AM 25 was PCE at the site?

1 A. I don't know who did this detection.

2 Q. No. My question is, in addition to the State, in
3 this 2002 order, did your own consultants also detect PCE in
4 samples from the soil at the Whittaker site?

10:02AM 5 MR. GALLAGHER: Vague as to "consultants" and time.

6 THE COURT: Vague as to time, sustained.

7 Q. (BY MR. RICHARD:) At some point between 2002 and
8 2010, you understood that your consultants had identified PCE
9 in the soil; is that fair?

10:02AM 10 A. I don't have a recollection of an understanding
11 between 2002 and 2010 regarding PCE. I'm not denying, though,
12 that our consultants have had samples with PCE detections in
13 soil at the site.

14 Q. Okay. And same thing for TCE, at line 8 of page 9,
10:02AM 15 it says, quote, "TCE is present in the soil beneath the former
16 surface impoundment and drum rinsing area near Building 317,"
17 period, close quote.

18 This is in the 2002 order. So it's fair to say
19 that, by 2002, you understood that TCE had been detected
10:03AM 20 beneath a former surface impoundment at that Building 317?

21 A. Yeah. I did understand that. I -- I had observed
22 that soil vapor extraction system, and I understood it was TCE.

23 Q. And did you understand, sir, that with respect to
24 that soil vapor extraction system you just mentioned, that the
10:03AM 25 folks hired to do that work removed 50,000 pounds of VOCs,

1 mostly TCE, from that area at Building 317?

2 A. No, I don't recall that, not in 2002.

3 Q. I'm sorry. At some point after the soil vapor
4 extraction system was put in, sometime between 2002 and today,
10:03AM 5 you understand that tens of thousands of pounds of VOCs have
6 been removed from that particular area?

7 A. I -- I don't. I don't.

8 Q. Okay. You don't deny that, you just don't know one
9 way or the other; is that true?

10:04AM 10 A. I don't know one way or the other. The consultants
11 produce very detailed reports. I'm sure whatever they pulled
12 from the soil, they've reported it.

13 Q. Okay. And the 2002 order goes on, at line 17, "In
14 1996, in an attempt to remove metallic debris from the
10:04AM 15 Burn Valley so that a geophysical survey and sampling could be
16 performed, respondent uncovered soil contaminated with" -- and
17 it lists a number of items, and then it identifies TCE. Do you
18 see that?

19 A. I see that.

10:04AM 20 Q. In a concentration from 110 milligrams all the way
21 up to 41,000 milligrams per kilogram. That's information you
22 learned in 2002; correct?

23 A. I don't have a specific recollection of that in
24 2002, but I read it here and I heard the testimony the other
10:05AM 25 day.

1 Q. Okay. And then the next chemical listed in the 2002
2 order to Whittaker identifies that PCE has also been identified
3 in concentrations in that area up to 25,000 milligrams per
4 kilogram. Correct?

10:05AM 5 A. I see that, yes.

6 Q. Okay. And if we go to page 13, we see -- and again,
7 it's talking about, at paragraph 2.8, public health and/or
8 environmental risk. And the paragraphs after that refer to the
9 Burn Valley. Do you see that? Line 19, for example, "The
10 Burn Valley is located in a dry stream bed that originates on
11 the site and extends beyond the site boundaries. Located
12 upgradient from the Burn Valley is the East Fork landfill."

13 You became generally familiar with those areas as
14 being problem areas at the site in 2002?

10:06AM 15 A. I -- I don't recall what I understood in 2002 about
16 the location of those -- the Burn Valley and East Fork
17 landfill.

18 Q. Okay. Well, here's what I'm going to ask you.

19 A. I just don't recall.

10:06AM 20 Q. I understand.

21 At the bottom of that page, 13, of this order from
22 2002, it says, at line 26, quote, "The groundwater underlying
23 the site has been a source of drinking water. Migration of
24 chemicals, such as TCE, PCE, NDMA, and perchlorate to the
25 groundwater creates a potential hazard of exposure to humans

10:06AM

1 from these hazardous substances through drinking water,"
2 period, close quote.

3 You recall reading that in 2002, do you not?

4 A. I don't. I see the words, though.

10:07AM 5 Q. So sometime after reading this order in 2002, did
6 you think it was just a little bit of TCE or did you develop
7 the understanding at some point after 2002 that this was a
8 serious -- there was a serious amount of TCE and PCE at the
9 Whittaker site?

10:07AM 10 A. Well, as I mentioned previously, I've always had a
11 little bit of difficulty on PCE. But I did understand that
12 this was a site contaminated with TCE.

13 Q. And when you say you --

14 A. I understand that.

10:07AM 15 Q. When you say you had a little bit of difficulty,
16 just to be clear, you really weren't sure if there was PCE in
17 the soil even as late as August of 2019; right?

18 A. Yeah. I --

19 Q. Okay.

10:08AM 20 A. I get -- I get -- you know, I'm like everybody else,
21 I get these acronyms mixed up. I don't have a clear
22 recollection in 2019 of what I knew about PCE, but I did have
23 an understanding on TCE.

24 Q. Okay. And so at some point after you get this order
10:08AM 25 we've been going through in 2002 and you're talking to your

1 consultants, you concluded that the TCE contamination simply
2 posed no risk to drinking water?

3 A. Well, I obviously have learned more about the site
4 since then and I've seen lots of studies. Um, and the
10:08AM 5 consultants that we use, um, are of the view that, um, the TCE
6 in the groundwater is limited to the site itself. In other
7 words, they've defined the plume.

8 Q. Okay. And so why don't we take a look at your 2019
9 deposition, page 69, lines 5 through 14.

10:09AM 10 A. Sure.

11 Q. You were asked -- 69.

12 THE COURT: You're going to display it on the
13 screen?

14 MR. RICHARD: Yes. And I'll read it to him,
10:09AM 15 Your Honor.

16 THE COURT: All right. You may do so.

17 MR. RICHARD: Thank you.

18 You were asked: *"Dropping down to line 6,*
19 *Exhibit 22, states, quote, 'The groundwater underlying*
10:09AM 20 *the site has been a source of drinking water and'" --*

21 THE COURT: Slow down, please.

22 MR. RICHARD: -- *"'drinking water, migration*
23 *of chemicals such as TCE, PCE, NDMA, and perchlorate to*
24 *the groundwater creates a potential hazard of exposure*
10:10AM 25 *to humans from these hazardous substances through drinking*

1 water, '" period, close quote.

2 "QUESTION: Is that a true statement?

3 Your answer: "I don't believe that. The

4 statement that TCE and PCE creates a potential hazard

10:10AM 5 through drinking water, I don't believe that's a correct

6 statement. In fact" --

7 MR. GALLAGHER: Objection, Your Honor. This is
8 improper impeachment.

9 MR. RICHARD: It's a party --

10:10AM 10 THE COURT: I don't need a response. The objection
11 is overruled.

12 MR. RICHARD: Thank you, Your Honor.

13 Q. (BY MR. RICHARD:) In fact, sir, at the time you
14 received this 2002 order, this trial Exhibit No. 1 that we've
10:10AM 15 been talking about, didn't you conclude that it was just some
16 document prepared by the Department of Toxic Substances Control
17 to satisfy some political concerns?

18 A. No.

19 Q. Wasn't it your conclusion at some point --

10:10AM 20 THE COURT: One second. Your answer is "No"?

21 THE WITNESS: Yeah.

22 THE COURT: Next question, please.

23 MR. RICHARD: Sure.

24 Q. (BY MR. RICHARD:) Isn't it true that rather than
10:11AM 25 taking these determinations as accurate and important based on

1 the samples and reports described in the order, you dismiss
2 these words as just some political fluff?

3 MR. GALLAGHER: Argumentative.

4 THE COURT: Overruled. I'm assuming there's a good
10:11AM 5 faith basis for that question.

6 MR. RICHARD: Yes, Your Honor.

7 THE COURT: The question is: Did you dismiss the
8 words as just some political fluff?

9 THE WITNESS: No.

10:11AM 10 Q. (BY MR. RICHARD:) If we can take a look at your
11 deposition, the next page, page 70, line 24, through page 71,
12 line 12.

13 MR. RICHARD: May I proceed, Your Honor?

14 THE COURT: Yes.

10:11AM 15 MR. RICHARD: *"QUESTION: At the time that*
16 *this Imminent and Substantial Endangerment*
17 *Determination and Order was issued, do you know if*
18 *Whittaker Corporation did anything to contest that*
19 *particular finding by DTSC?*

10:12AM 20 *"ANSWER: Yes. We had been negotiating with*
21 *DTSC a Consent Order. We would never have included*
22 *these words in it, not without some sort of*
23 *qualification or denial or whatever. So, you know,*
24 *these are words that are written by some staff person*
10:12AM 25 *at DTSC and, you know, they're their words. But yeah,*

1 we were trying to negotiate a consent agreement, and
2 they just dropped this on us, as I understand it, in
3 order to satisfy some political concerns."

10:12AM 4 Q. (BY MR. RICHARD:) That was your view in August 2019
5 of the State's Imminent and Substantial Endangerment Order from
6 2002; correct?

7 A. Yes.

8 MR. RICHARD: All right. I have no further
9 questions at this time, Your Honor.

10:12AM 10 THE COURT: Cross-examination, please.

11 MR. GALLAGHER: Thank you, Your Honor.

12 **CROSS-EXAMINATION**

13 BY MR. GALLAGHER:

14 Q. Good morning, Mr. Lardiere. Are you doing okay?

10:13AM 15 A. Yes. Thank you.

16 Q. Picking up where counsel left off, the Imminent and
17 Substantial Endangerment Order, I'd like to understand a little
18 bit of background as to how that came about.

19 First question to you is: When you were hired by
10:13AM 20 the company in 2000, I assume you were asked to get up to speed
21 on the status of the Bermite property; correct?

22 A. Yes.

23 Q. Okay. And what did you do in that regard?

24 A. I read some of the background documents.

10:13AM 25 Q. And did that include the Consent Order in '94 that

1 we discussed earlier?

2 A. I believe it did.

3 Q. And the AME, or Acton-Mickelson Environmental,
4 reports, is it your understanding that that came after the '94
10:14AM 5 Consent Order?

6 A. Correct.

7 Q. Is it your understanding that they were required as
8 part of that Consent Order?

9 A. Yeah. That --

10:14AM 10 MR. RICHARD: Objection. Leading, Your Honor.

11 THE COURT: Sustained.

12 The answer is stricken. The jurors are to disregard
13 it.

14 Q. (BY MR. GALLAGHER:) Do you have an understanding as
10:14AM 15 to why the AME reports came about?

16 A. The 1994 Consent Order had a series of very orderly
17 steps that were to be taken. And the remedial investigation,
18 or RI, was one of the first steps to be taken by Whittaker
19 Corporation pursuant to that Consent Order.

10:14AM 20 Q. And during this time, as I understand from your
21 testimony, the property was sold; correct?

22 A. Yes. The property was sold in around 1999 to
23 Remediation Financial, Inc.

24 Q. And what was the intent, if you know, of RFI, or --
10:15AM 25 I thought the other company was SC, LLC?

1 A. Right. You've corrected --

2 MR. RICHARD: Objection. Calls for speculation.
3 Lacks foundation.

4 THE COURT: Sustained.

10:15AM 5 And the jury is to disregard counsel's testimony.
6 Remember, he's not allowed to testify. He's allowed to ask
7 questions.

8 So whenever you hear a lawyer saying "I thought
9 this" or essentially trying to present facts, ignore that
10:15AM 10 because it's not testimony.

11 Ask a question. Don't testify.

12 MR. GALLAGHER: Yes, Your Honor.

13 Q. (BY MR. GALLAGHER:) And who was the company -- I'm
14 sorry. Who was the property sold to, if you know?

10:15AM 15 A. Well, the -- the actual company that takes title to
16 it is Santa Clarita, LLC. It's a limited liability company,
17 and the managing member and owner is an entity called
18 Remediation Financial, Inc., and then they have some other
19 limited liability owners in that group. I don't know them.

10:16AM 20 Q. And do you have an understanding of what it is they
21 had planned to do with respect to the Bermite site?

22 A. I do.

23 Q. And what is that understanding?

24 A. Remediation Financial, Inc., is what they call a
10:16AM 25 Brownfield firm. So what they'll do is they'll take a

1 contaminated piece of property and they get it at a really
2 discounted price. And they will clean it up. So that's the
3 deal, sort of like a fixer-upper. Okay? They're taking the
4 property at a low price, but they are agreeing to clean it up.

10:16AM

5 Q. And do you have an understanding of how far they got
6 in the process of cleaning up the property before the 2002
7 Imminent and Substantial Endangerment Order was entered?

10:17AM

8 A. I believe they had cleaned up what is called
9 Operable Unit 1, which is the -- it's about a quarter -- the
10 site is about a thousand acres. Operable Unit 1 is the --
11 about 25 percent on the western boundary of the site.

12 Q. And at -- at some point, obviously the 2002 Imminent
13 and Substantial Endangerment Order was entered. Do you have an
14 understanding as to why that happened?

10:17AM

15 A. Yes.

16 Q. And what is that understanding?

10:18AM

17 A. I received a letter from Brian Hembacher, who is
18 Deputy Attorney General, State of California. And in his
19 letter, he informed Whittaker that RFI, Remedial -- Remediation
20 Financial, Inc., had stopped work, that they had defaulted on
21 their obligations under their enforceable agreement with --
22 with the DTSC, with Department of Toxic Substances Control.
23 And Mr. Hembacher requested Whittaker to voluntarily come back
24 in and clean up the site.

10:18AM

25 Q. And who is Sara Amir?

1 A. She was at the time the head of DTSC's Glendale
2 office. I think she's moved on, but she -- that was her title
3 then.

4 Q. And at that time, did you have to deal with Ms. Amir
10:18AM 5 and how to handle the transition from SC, LLC, to Whittaker?

6 A. Yes.

7 Q. And can you explain to me what the nature of those
8 conversations were and what your understanding was as to how
9 Whittaker was going to take over?

10:18AM 10 A. Okay. So, um, the first contact was Ms. Amir called
11 me. And I had known her from another matter. She called me
12 and she asked me -- they had -- the department had done some
13 geophysical surveying of an area off the site in one of the
14 little valleys, and they had detected some metal. And she
10:19AM 15 asked me if I would arrange to have that metal basically
16 investigated and dug up. And so I -- I told her yes. And
17 we -- well, I'm doing kind of a narrative.

18 But in any event, that's my first contact.

19 THE COURT: That's a good time for counsel to
10:19AM 20 interject.

21 MR. RICHARD: Objection, Your Honor. Narrative.

22 THE COURT: Sustained.

23 MR. RICHARD: Maybe you meant other counsel. I
24 don't know.

10:19AM 25 Q. (BY MR. GALLAGHER:) So we have an understanding of

1 your first meeting with Ms. Amir.

2 A. Yes.

3 Q. What's your -- what was your involvement with her in
4 connection with the Imminent and Substantial Endangerment Order
10:20AM 5 that was eventually issued in 2002?

6 A. Well, we -- we, you know, after Mr. Hembacher
7 contacted us, we had a meeting with the state officials and we
8 had our external counsel, Joe Armao from Heller Ehrman. And we
9 agreed to come back in. And the State sent us a draft of what
10:20AM 10 our agreement would look like. And Joe -- and Joe sent the
11 draft back with some markups. Sara was part of that review
12 process, Ms. Amir.

13 Q. And this agreement is not what we're seeing as
14 Exhibit 1, the Imminent and Substantial Endangerment Order;
10:20AM 15 correct?

16 A. No. No.

17 Q. What's this agreement that you're talking about?
18 Can you explain to us what that is and what your understanding
19 of it was?

10:21AM 20 A. Yeah. Well, we -- excuse me. Yes. We had
21 exchanged at least one markup of the State's draft, and then
22 the Imminent and Substantial Endangerment Order was delivered
23 to us.

24 Q. Um, is it your understanding that you thought you
10:21AM 25 had an agreement with the DTSC prior to this Imminent and

1 Substantial Endangerment Order being issued?

2 A. Yeah. They had --

3 MR. RICHARD: Objection. Leading, Your Honor.

4 Also, Your Honor, can I request that the witness be
10:21AM 5 instructed to just give me a second for some of these leading
6 questions to stand up and object.

7 THE COURT: Yes. The objection is sustained.

8 And you've heard, Mr. Lardiere, you should pause
9 before you actually give your answer.

10:21AM 10 THE WITNESS: Will do.

11 THE COURT: Non-leading questions, please.

12 Q. (BY MR. GALLAGHER:) Okay. What was the status of
13 this negotiation at the time you received the Imminent and
14 Substantial Endangerment Order?

10:22AM 15 A. It was underway.

16 Q. And what do you mean by that?

17 A. We exchanged drafts.

18 Q. Did you have an understanding that the Imminent and
19 Substantial Endangerment Order was going to be issued?

10:22AM 20 A. No. That was a surprise.

21 Q. Once you received the order, did you have a further
22 discussion with Ms. Amir?

23 A. I called her.

24 Q. And what was the nature of that discussion?

10:22AM 25 A. I don't recall my exact words. But, in effect, I

1 asked, "What gives?" And she told me it was out of her hands,
2 that it had been directed.

3 Q. And directed by who, if you know?

4 A. I think she said Sacramento.

10:22AM 5 Q. And Sacramento meaning -- is that the headquarters
6 of DTSC?

7 A. State government.

8 Q. Okay. I'm going to fast-forward. We talked a lot
9 about the site and what you may or may not recall.

10:23AM 10 Do you have an understanding, as you sit here today,
11 as to what the on-site remediation status is?

12 A. Yes.

13 Q. And if you would -- I understand there are several
14 operable units. Do you have an understanding of how many
10:23AM 15 operable units are designated for this site?

16 A. Seven.

17 Q. And does some of -- do some of those operable units
18 have to do with the on-site soil contamination?

19 A. Operable Units 1 through 6 are soil management
10:23AM 20 operable units that covers the -- the site, and then Operable
21 Unit 7 is the extent of the groundwater. So that can extend
22 offsite.

23 Q. And do you have an understanding, as you sit here
24 today, as to what the status is of the OUs 1 through 6 in terms
10:24AM 25 of the status of the cleanup?

1 A. Yes.

2 Q. Okay. And what is that status, if you know?

3 A. Whittaker has achieved approval by the Department of
4 Toxic Substances Control for our completion of the remedial
10:24AM 5 action plan for the site, and our completion report was
6 approved by the Department.

7 Q. And do you know when that occurred, that approval?

8 A. Uh, approximately a year ago, maybe two years.

9 Q. Switching gears real quick, we have heard the name
10:24AM 10 Gordon Louttit. Do you know who that person is?

11 A. I know Gordon.

12 Q. And what was his role at the company?

13 A. He preceded me. He was in the legal department. I
14 think he had several titles, but I believe at one point he was
10:25AM 15 general counsel.

16 Q. And you have interacted with Mr. Louttit?

17 A. A few times, yes.

18 Q. And how many conversations would you say you've had
19 with Mr. Louttit?

10:25AM 20 A. Two or three face-to-face and probably 20 phone
21 calls.

22 Q. You were sitting here in court when Mr. Sorsher,
23 former staffer at the DTSC, recounted a conversation he had
24 with Mr. Louttit. Do you recall that?

10:25AM 25 A. I do.

1 Q. Based on your experience with Mr. Louttit, would
2 Mr. Louttit ever lie?

3 MR. RICHARD: Objection --

4 THE COURT: The objection is sustained.

10:25AM 5 Q. (BY MR. GALLAGHER:) You heard the testimony of
6 Mr. Sorsher; correct?

7 A. Yes.

8 Q. Do you have an understanding -- or do you have any
9 different interpretation of that conversation, based on your
10:25AM 10 experience with Mr. Louttit?

11 THE COURT: Sustained.

12 Please don't ask questions that he clearly has no
13 foundation for.

14 Q. (BY MR. GALLAGHER:) Can you describe to me --

10:26AM 15 THE COURT: No. Don't go there. He's not going to
16 be able to testify as to what Mr. Louttit might or might not
17 have done based upon his knowledge of Mr. Louttit.

18 MR. GALLAGHER: Fair enough.

19 Thank you, Your Honor. Nothing further.

10:26AM 20 THE COURT: Redirect.

21 MR. RICHARD: Yes, Your Honor, just very briefly.

22 **REDIRECT EXAMINATION**

23 BY MR. RICHARD:

24 Q. So as I understand your testimony, sir, when you
10:26AM 25 started with Whittaker, you did review some background

1 documents as to what had been going on at the site for the
2 years before you got there?

3 A. Yeah, I testified to that in response to your
4 questions.

10:26AM

5 Q. And so -- and you just testified in response to your
6 attorney's question that some number of these operable units
7 have recently, within the last year or two, been deemed cleaned
8 up to some degree or status. Did I get that right?

9 A. Well, not exactly. The operable unit what?

10:27AM

10 THE COURT: "Not exactly" is the answer. What's
11 your next question?

12 MR. RICHARD: Thank you.

13 Q. (BY MR. RICHARD:) My question is: Whatever the
14 status of the recent cleanup efforts have been, you have no
15 information as to why Whittaker was unable to clean up the
16 property between 1980 and 2010, do you?

10:27AM

17 MR. GALLAGHER: Assumes facts. Calls for
18 speculation.

19 MR. RICHARD: I'll ask a new question.

10:27AM

20 THE COURT: Thank you.

21 Q. (BY MR. RICHARD:) For the period of time before you
22 started at Whittaker, even though you reviewed some of the
23 materials when you started, isn't it fair to say you have no
24 information as to why Whittaker was unable to clean up the
25 property before 2000?

10:27AM

1 MR. GALLAGHER: Argumentative.

2 THE COURT: Overruled.

3 THE WITNESS: Well, uh, not exactly. I mean, I read
4 documents when I joined the company in 2000. Some of those
10:28AM 5 documents indicated that Whittaker had clean closed 13 out of
6 14 RCRA hazardous waste management units. I read that. And
7 that was repeated on the screen we were all looking at
8 previously. So I did understand that, and that's remediation.
9 Certainly that work was done.

10:28AM 10 And pursuant to the 1994 consent agreement, there
11 were certain steps that had to be taken, and one of those steps
12 was to conduct a remedial investigation. So that's part of the
13 process. They want to have it fully characterized before you
14 start cleaning it up. It's the way -- it's the way it works.

10:28AM 15 You have to go through the remedial investigation,
16 they have to approve your work plan, they have to approve the
17 results. Once that's done, then you submit a remedial action
18 plan. And that step hadn't been taken as of 2000 when I joined
19 the company. We had -- the company had sold the property to a
10:29AM 20 remediation company to complete that work. And it was not done
21 when I joined the company in 2000.

22 Q. (BY MR. RICHARD:) And so the sale was in 1999;
23 right?

24 A. Yes. I think it was 1999, possibly 1998. I think
10:29AM 25 it was 1999.

1 Q. Okay. So you understood that Whittaker -- and it
2 was Whittaker's responsibility and its consultants to prepare
3 those remediation plans between 1987 and 1999 before the
4 property was sold?

10:29AM

5 A. Um, well, the -- the Consent Order was 1994, not
6 1987. And as I just testified, it -- it has a certain order to
7 it. It's just standard. It's nothing magical about it. First
8 you have to define the problem. That's what remedial
9 investigation is.

10:29AM

10 Q. Sure.

11 A. What's the problem that you're going to try to fix?
12 And then the remedial action plan is: What are you going to do
13 to fix it? And then you -- once that's approved, then you
14 implement the wrap. And if they approve the work you've done,
15 then you get your -- your letter saying that they approve your
16 completion report.

10:30AM

17 Q. Okay. Whatever the cause for many, many years going
18 by without the remediation being completed, can we agree that
19 whatever the cause of that delay, it wasn't my client, the
20 water agency's?

10:30AM

21 MR. GALLAGHER: Calls for speculation. Lacks
22 foundation.

23 Q. (BY MR. RICHARD:) For the work done at the
24 Whittaker site?

10:30AM

25 THE COURT: Sustained.

1 Q. (BY MR. RICHARD:) As you sit here, do you believe
2 that the water agency is responsible for Whittaker not
3 completing a cleanup of the site before 1999?

4 MR. GALLAGHER: Outside the scope.

10:30AM 5 THE COURT: Sustained.

6 Q. (BY MR. RICHARD:) You do have the understanding
7 that the site was not cleaned up by 1999; correct?

8 A. Correct.

9 Q. And as of 1999, is there anything that you believe
10 the water agency did between 1994 and 1999 that prevented
11 Whittaker from completing the remediation?

12 MR. GALLAGHER: Outside the scope. Lacks
13 foundation. Calls for speculation.

14 THE COURT: I'll allow this. This is your last
10:31AM 15 question?

16 MR. RICHARD: Yes, Your Honor.

17 THE COURT: Yes. You can answer the question.

18 THE WITNESS: No.

19 MR. RICHARD: Thank you.

10:31AM 20 THE COURT: All right.

21 MR. GALLAGHER: Thank you, Your Honor. Nothing
22 further.

23 THE COURT: Very well.

24 And we are, ladies and gentlemen, going to take our
10:31AM 25 morning recess. It's now 10:30. We will break until 10:45.

1 Please don't speak to anyone about the case, the
2 people, or the subject matter involved. Remember to keep an
3 open mind.

4 We're in recess.

10:32AM

5 (Out of the presence of the jury:)

6 We're in recess until 10:45. Thank you.

7 (Break taken.)

8 (In the presence of the jury:)

10:48AM

9 THE COURT: We remain on the record in the trial
10 matter. And we are here with all counsel, as well as the jury.
11 And we are still in the plaintiff's case, and we are at your
12 next witness, Mr. Gee.

13 MR. GEE: Yes, Your Honor. Plaintiffs would like to
14 call their next witness, Ms. Phyllis Stanin.

10:48AM

15 THE COURT: Please step forward.

16 THE COURTROOM DEPUTY: Would you please walk around
17 and step on the witness platform.

18 Would you please raise your right hand to be sworn.

10:49AM

19 Ma'am, do you solemnly swear that the testimony you
20 shall give in the cause now before this Court shall be the
21 truth, the whole truth, and nothing but the truth, so help you
22 God?

23 THE WITNESS: Yes.

24 THE COURTROOM DEPUTY: Thank you. Please be seated.

10:49AM

25 Ma'am, for the record, would you please state your

1 name and then spell your last name.

2 THE WITNESS: Phyllis Stanin, S-t-a-n-i-n.

3 THE COURTROOM DEPUTY: Thank you.

4 There's some fresh water if you need it.

10:49AM 5 THE WITNESS: Thank you.

6 THE COURT: Mr. Gee.

7 **PHYLLIS STANIN,**

8 **PLAINTIFF'S WITNESS, WAS SWORN AND TESTIFIED AS FOLLOWS:**

9 **DIRECT EXAMINATION**

10:49AM 10 BY MR. GEE:

11 Q. Ms. Stanin, can you provide us with your educational
12 history?

13 A. Yes. I have a bachelor of science degree from the
14 University of North Carolina in geology and a master's of
10:49AM 15 science in environmental management from the University of
16 San Francisco with a hydrogeology thesis.

17 Q. And do you hold any professional licenses?

18 A. Yes. I'm a -- a professional geologist, certified
19 hydrogeologist, certified engineering geologist in California,
10:50AM 20 and I'm also a registered geologist in Arizona.

21 Q. And you mentioned that you conducted a thesis
22 when -- for your master's degree. What was the topic of your
23 thesis?

24 A. The thesis did research on geological faulting and
10:50AM 25 discontinuities in a groundwater system.

1 Q. And can you briefly tell us a little bit about your
2 professional experiences?

3 A. Sure.

4 I'm vice president and principal geologist for
10:50AM 5 Todd Groundwater, a groundwater specialty firm specializing in
6 planning, development, and management and protection, all
7 aspects really of groundwater.

8 My professional expertise involves groundwater basin
9 management, manage aquifer recharge, and, of course, water
10:50AM 10 quality, including contaminant fate and transport in the
11 groundwater.

12 Q. And, Ms. Stanin, have you worked on any projects, if
13 you will, that are similar to the one that you've just studied?

14 A. Yes. I've worked on many small and large projects
10:51AM 15 involving VOCs. The more similar projects, I think, are the
16 San Gabriel Basin Superfund site where I worked there for
17 almost ten years looking at perchlorate and TCE in groundwater
18 that had migrated 7 or 8 miles downgradient of the source area.

19 There was also a project that I worked on in
10:51AM 20 Rancho Cordova area involving perchlorate and TCE plumes in
21 groundwater that had migrated offsite. And then another
22 project for Orange County Water District involving perchlorate
23 and TCE and other contaminants that have migrated several miles
24 downsite. In all of those projects, water supply wells had
10:52AM 25 been impacted.

1 Q. And, Ms. Stanin, how long have you been practicing?

2 A. 42 years.

3 Q. Ms. Stanin, what was the scope of your engagement
4 for SCV Water?

10:52AM 5 A. I was asked to look at the hydrogeological situation
6 near the Whittaker site because water supply wells had been
7 impacted with contaminated groundwater.

8 Q. And did you prepare an expert report?

9 A. Yes.

10:52AM 10 Q. Your -- your report involves the Whittaker site and
11 some contaminated wells. Um, did you prepare a -- a figure
12 graphic to show where the wells were in comparison to the site?

13 A. Yes, I did. It was Figure 1 in my expert report.

14 Q. Okay. And can I publish Exhibit 158, which was
10:53AM 15 stipulated to?

16 (Exhibit 158 received into evidence.)

17 Q. (BY MR. GEE:) Ms. Stanin, you mentioned a Figure 1
18 in your expert report. Is this the figure that you were
19 referring to?

10:53AM 20 A. Yes, it is.

21 Q. And are these the Santa Clarita Valley wells that
22 you were asked to review?

23 A. Yes. In particular -- there are a couple of
24 additional wells on this map. But in particular, I was looking
10:53AM 25 at Saugus 1, Saugus 2, V-201, V-205. V-157 that you see there

1 between the Saugus wells and the V-201 I also looked at, but
2 that well has now been destroyed. Essentially, all of the
3 wells that are now circled in red are downgradient of the
4 Whittaker site and detected perchlorate.

10:53AM

5 Q. And what -- which of these wells were the focus of
6 your analysis?

7 A. If we go to the next animation here, we'll see some
8 yellow circles pop up. And that shows the wells that TCE and
9 other VOCs have been detected in, and they were really the
10 focus of this analysis.

10:54AM

11 Q. And can you identify those wells by name?

12 A. Yes. Saugus 2 and Saugus 1, which are close to the
13 Whittaker site, V-157 that I mentioned that has been destroyed,
14 V-201, and V-205.

10:54AM

15 Q. And, Ms. Stanin, was that the first time that you
16 evaluated contamination from the Whittaker site?

17 A. No. Actually, I worked on this site with
18 Todd Groundwater in 2002 where we were asked to do a
19 hydrogeological investigation for perchlorate at that time.

10:54AM

20 Q. And was your assignment similar to the assignment
21 that you've undertaken in this engagement?

22 A. Yes. Part of that assignment involved developing
23 pathways where the contaminants could migrate from the
24 Whittaker site to the downgradient water supply wells.

10:55AM

25 Q. And what were the conclusions of your reports in

1 2003 and 2006?

2 A. We determined that the perchlorate that had been
3 impacting those water supply wells originated from the
4 Whittaker site.

10:55AM

5 Q. And during the time that you prepared your expert
6 report, what -- was it uncontested that the Whittaker site was
7 the source of the perchlorate?

8 A. No. No.

10:55AM

9 Q. And is it your understanding that the Whittaker site
10 was ultimately determined to be a source of perchlorate in
11 water supply wells?

12 A. Yes. Those were the conclusions of our report, and
13 my understanding is that finding had been affirmed.

10:56AM

14 Q. And what was your determinations based on for your
15 prior reports?

16 A. Um, essentially, we were looking at three general
17 things. You can think of them as sort of buckets. We were
18 looking at the aquifers in the system that held the
19 groundwater. We were looking at the water quality in the wells
20 and the determination of what contaminants were there, whether
21 or not that matched back up with the contaminants beneath the
22 Whittaker site and whether or not those aquifers were
23 connected. And then, finally, we looked at the groundwater
24 flow directions to make sure that there were pathways along
25 groundwater flow, that those contaminants could migrate in the

10:56AM

1 contaminated aquifer.

2 Q. And you mentioned you prepared two expert reports
3 for the prior litigation. Was the subject of the 2006 report
4 different than the 2003 report?

10:56AM

5 A. Um, it was generally the same concepts that we were
6 looking for pathways for perchlorate contamination. But by
7 2006, we had noted that there were additional contaminants that
8 had impacted water supply wells. So we included part of that
9 in the 2006 report. So really, it was an update of what we had
10 done in 2003.

10:57AM

11 Q. And comparing your work in 2003 to 2006 to now, are
12 there any changes in the approach -- in your approach to
13 analyzing the source of contamination found in SCV Water supply
14 wells?

10:57AM

15 A. Well, I would say not so much for the approach, but
16 there were a lot more data. So we were able to really do a
17 better job at delineating pathways at that time --

18 Q. And --

19 A. -- than we had in 2003.

10:57AM

20 Q. And what data -- what data was important for your --
21 or what data is different now than it was back in 2003?

22 A. Well, from 2003 to 2006, there were really two
23 things that we were able to get that we hadn't had in 2003.
24 One was about 100 more monitoring wells. So that gives you a
25 lot more information, a lot more data, as you can imagine.

10:58AM

1 So all of those wells had been sampled from 2003 to
2 2006, so we had a lot more information on the contamination in
3 the groundwater.

4 And then the second sort of piece of information is
10:58AM 5 that Whittaker had begun some of the planning for remedial
6 actions to clean up some of the contamination at the site. And
7 as a result of that, there had been a lot more onsite
8 investigation. So there were more soil samples, there were
9 more soil gas samples. There was just a lot more information
10:58AM 10 with respect to that and, putting all of that together, a
11 better understanding of the hydrogeology.

12 Q. What is the source -- where did you get the data for
13 your most recent report?

14 A. Well, we had most of it already compiled, the
10:58AM 15 historical information for the 2003 and the 2006 report. So we
16 still had some of that information in-house.

17 But we were able to access a wide variety of
18 information that's reported on the Department of Toxic
19 Substances Control. It's a portal, a website portal. And they
10:59AM 20 are required to -- that they, of course, are providing
21 oversight for the investigation at the Whittaker site. And
22 they are required to put all of that information on this public
23 portal so you can access all of the data and information being
24 generated for the site.

10:59AM 25 Q. And is there anything that you did to determine

1 whether that data was reliable?

2 A. Um, well, there's a variety of things that you
3 would -- you would consider when you download a document and
4 download data. The first is how it was collected and whether
10:59AM 5 there were QC procedures and protocols in place for the
6 collection of that data. That would apply to the field data.

7 And for the documents themselves, they were mostly
8 prepared by the consultants, the hydrogeological and
9 engineering consultants that Whittaker had hired. And as a
11:00AM 10 result of that, these are firms that I know, colleagues in
11 those firms that I know, and the firms are reputable firms.

12 So I believe that their analysis and their putting
13 together the compilation of the information in these documents
14 can be relied on.

11:00AM 15 Q. Okay. Ms. Stanin, what was the approach that you
16 took for your -- for the expert report that you prepared in --
17 I think it's 2020?

18 A. Yes. It was August, I think, 2020.

19 Um, it was very similar to the same approach that we
11:00AM 20 took for 2003 and 2006. So again, sort of thinking in terms of
21 the three main things that we look at.

22 One is on the Whittaker site, source areas and
23 environmental data. And when I say "environmental data," I
24 mean are the contaminants in the soil? Are the contaminants in
11:01AM 25 other aspects? Are there contaminants in groundwater? So it's

1 a sort of matching up of those environmental data that indicate
2 a release of contamination and the contamination in the
3 groundwater.

11:01AM 4 The next thing, of course, is to understand which
5 aquifers are contaminated.

6 And then the last piece of that is looking at the
7 contaminated aquifers and how groundwater, within those aquifer
8 layers, move off of the site.

11:01AM 9 Q. And, Ms. Stanin, I note on your Figure 1 that the
10 wells that you studied are not located directly beneath the
11 Whittaker site. How does contamination get to those water
12 supply wells?

11:02AM 13 A. Once groundwater -- once the contaminants move
14 through the soils down to the water table, once they hit the
15 water table, they move. Um, groundwater is always in motion.
16 It's in motion below us right now. It doesn't move very fast,
17 it's not like surface water. So it moves a little slower than
18 that, but it moves.

11:02AM 19 It moves from high -- we call it upgradient, high
20 elevation of the groundwater surface to the low elevations of
21 the groundwater surface. So you can think of it sort of as an
22 uphill/downhill situation where water is flowing downhill. We
23 call that upgradient and downgradient because it is the
24 hydraulic gradient that you're looking at.

11:02AM 25 Q. And, Ms. Stanin, how do you determine what direction

1 groundwater flows -- flows in?

2 A. Well, you use the monitoring wells and other wells
3 in the area to measure groundwater elevations in the various
4 aquifer units. Once you get those elevations compiled, you can
11:03AM 5 plot them on a map and you can connect -- we call them contour
6 lines. You can connect the same elevations. And then that
7 gives you lines of elevation. And flow would be perpendicular
8 to those lines. So that's the general process.

9 Q. Okay. And you mentioned that you looked at -- for
11:03AM 10 your first step was to take a look at the source areas. Let's
11 see. How did you go about conducting the -- your assessment of
12 the source areas of contamination at the Whittaker site?

13 A. Well, again, we already had a lot of that
14 information compiled. So I reviewed that information as well
11:03AM 15 as additional information about the areas that contaminants
16 were used, stored, disposed of, spilled, et cetera, and, um,
17 sort of lined those up on the map and compared those back to
18 the environmental data.

19 Q. And did you create any kind of depiction of where
11:04AM 20 the source areas are in your expert report?

21 A. I bothered -- I borrowed from others for that
22 because CDM Smith had done a detailed assessment of VOC and
23 perchlorate-impacted areas. So I used that information that
24 had been provided in those reports.

11:04AM 25 MR. GEE: I'd like to publish Exhibit 171, which was

1 stipulated to.

2 (Exhibit 171 received into evidence.)

3 Q. (BY MR. GEE:) Ms. Stanin, is this a -- the
4 foundation drawing for which -- for which you have drawn
11:05AM 5 contamination -- contamination source spots?

6 A. Yes. This is the Whittaker site with the operable
7 units labeled there "OU" on the map.

8 Q. And what is an operable unit?

9 A. Oftentimes a -- a site that is doing some
11:05AM 10 environmental investigations will divide up their area based on
11 a variety of things. They might be divided up based on
12 topography, groundwater flow, types of contaminants, et cetera.
13 It allows for a more focused look at what's going on in a
14 specific area when the site is this big.

11:05AM 15 Q. Okay. And whereabouts was contamination found on
16 the Whittaker -- at the Whittaker-Bermite site?

17 A. Well, if we go to this first animation here, you can
18 see these green areas. The legend identifies these as
19 VOC-impacted areas. Again, this was done by a Whittaker
11:06AM 20 consultant, CDM Smith, as part of the remedial actions on the
21 site.

22 The green areas represent areas where soil has been
23 contaminated with VOCs, and those soil concentrations actually
24 exceed screening levels. In other words, they're too high to
11:06AM 25 be left in place without remediation. So these are their

1 priority areas of VOC impacts.

2 Q. Okay. And did you do the same thing for other
3 contaminants?

4 A. Yes. We -- if you go to this next animation, you
11:06AM 5 can now see pink areas showing up. Those are labeled in the
6 legend "perchlorate-impacted area." So these two, similar to
7 the green areas, are areas where contaminants have been
8 detected in soil. And, um, one of the things that you'll see
9 is that the pink areas and the green areas in many parts of the
11:07AM 10 site line up, indicating that both contaminants were used in
11 the same area.

12 Q. And why was it important to you to know that the
13 contamination -- contaminants were located in the same source
14 areas?

11:07AM 15 A. Well, we had already done quite a bit of work with
16 perchlorate, so we knew something about the pathways for
17 perchlorate. And because the scope of work was to determine
18 plausible pathways for the VOCs, the fact that they overlay
19 some of the source areas gave us an early indication that they
11:07AM 20 may be following the same pathways.

21 Q. And in reviewing all of the other expert reports, is
22 there any disagreement that -- that the source areas for VOCs
23 and perchlorate are similar or the same?

24 A. No, I don't think there's any disagreement about
11:08AM 25 that.

1 Q. Okay. And so once you determine what the source
2 areas were at the Whittaker-Bermite site, what -- what did you
3 do next?

11:08AM 4 A. Well, this is limited to areas where we have seen it
5 in soil and soil gas. And, of course, we're interested in
6 seeing what the concentrations are in groundwater.

7 So we began to focus in on the groundwater data,
8 looking specifically in these source areas but also offsite,
9 recognizing that groundwater moves.

11:08AM 10 Q. Okay. And you mentioned groundwater moves. Where
11 does groundwater -- what is the -- what is the mechanism for
12 which groundwater moves?

13 A. Groundwater motion is controlled by gravity and
14 pressure. And in most cases where we see an upland area, we
11:09AM 15 see that it's also an area of high groundwater elevation.

16 So in general, groundwater is moving from these
17 upland areas in the hills on the Whittaker site down toward the
18 valley where the water supply wells are located.

19 Q. Okay. And you mentioned groundwater. Is
11:09AM 20 groundwater different than surface water?

21 A. Yes, of course. Groundwater is beneath the surface,
22 for one thing.

23 The main difference, really, is that there's no
24 underground river or underground lake. There's sediments and
11:09AM 25 rocks beneath us. So the water is actually moving through

1 sands and gravels. You can think of how water moves through
2 sand at a beach.

3 And as a result of that, the water is moving slower
4 than surface water because it's hitting sand grains and going
11:09AM 5 around the sand grains and -- and moves through pores of the
6 sediment rather than simply flowing on top of the earth.

7 Q. And you mentioned the term "aquifer." Is that the
8 groundwater streams that you're -- that you just discussed?

9 A. Yes. So the aquifers are really defined here as the
11:10AM 10 more permeable units in the subsurface. They hold the most
11 groundwater. And groundwater can move more easily through the
12 aquifer layers. And as a result of that, if the groundwater is
13 contaminated, then the contaminants can also move easier
14 through the aquifer system.

11:10AM 15 Q. Okay. And you mentioned that before it gets to
16 groundwater, it has to percolate through the soil. Did you
17 consider how long it takes to -- for the contamination to
18 percolate through the soil to get to groundwater?

19 A. Um, yes, we did consider that. I mean, the first
11:10AM 20 process, of course, is to look for information that had been
21 done on the Whittaker site by the consultants for that. But
22 there was essentially nothing that had estimated any kind of
23 travel time through the unsaturated zone as the contaminants
24 moved down to the water table.

11:11AM 25 I looked at that as -- you know, from the standpoint

1 of is this going to be a limiting factor. But the terrace
2 deposits that are on the site, at the Whittaker site are
3 relatively permeable. It's mostly sands. They have some fine
4 grain sands and a little bit of clay fraction to them. But
11:11AM 5 they shouldn't impede the downward movement of recharge or
6 contaminants to the extent, you know, I think -- I had made
7 some early estimates of somewhere around 2 feet a day, you
8 know, moving down through the vadose zone. So it didn't seem
9 to be a controlling factor.

11:12AM 10 Q. Excuse me. I'm sorry. Did you finish your answer?
11 I didn't mean to cut you off.

12 But did you include any information about soil
13 travel time in your expert report?

14 A. No, we didn't. As I said, I didn't see it to be a
11:12AM 15 significant limiting factor. So it's not included.

16 Q. And based on your 2-feet-per-day estimate --

17 MR. BLUM: Objection, Your Honor. This is beyond
18 the scope of her report and of her deposition.

19 THE COURT: Is it?

11:12AM 20 MR. GEE: It is. I just --

21 THE COURT: Sustained.

22 MR. BLUM: I would move to strike the testimony
23 about 2 feet per day.

24 THE COURT: It is stricken.

11:13AM 25 Q. (BY MR. GEE:) Ms. Stanin, on this graphic, you show

1 that there are a number of different source areas where
2 contamination was found at the Whittaker-Bermite site. Do you
3 have any -- any way of knowing how much contamination was
4 released to the site?

11:13AM

5 A. Well, there really weren't complete historical
6 records going back to the 1930s in this area. And, um, as a
7 result of that, we are really just relying on what's being done
8 now with respect to soil and soil gas remediation.

11:14AM

9 In some of the CDM reports -- and I believe I
10 included some of this in my expert report -- there had been a
11 report of -- I think 260,000 pounds of VOCs that had been in
12 place in the Burn Valley. That is the green area with the pink
13 overlay and OU-3, you can kind of see from the topography of
14 that map, the sort of valley area that was called the
15 Burn Valley.

11:14AM

16 So that's -- that's an estimate.

17 Q. Okay. And do you have an estimate as to the order
18 of magnitude of waste material that was -- or wastes that was
19 found in the soil beneath the site?

11:14AM

20 A. Well, it's a little difficult. Some of it had
21 already been removed, and the records for the amount removed
22 were not great. We did see from the CDM Smith report that
23 there was an extra -- maybe 40,000 pounds of contamination that
24 had also been removed prior to the CDM Smith estimate of
25 260,000 pounds. So maybe, you know, 300,000 pounds of

11:15AM

1 contaminants associated with that one area.

2 Q. Okay. And is 300,000 pounds a lot? And can you
3 give me sort of a -- a way of understanding how much
4 300,000 pounds is?

11:15AM 5 A. Yeah. Um, so a gallon of TCE varies in weight,
6 depends on temperature, et cetera, but weighs about 12 pounds.
7 So if you think about 300,000 pounds and 12 pounds per gallon,
8 then that comes out to about 25,000-gallon jugs you can think
9 of as contamination. So a lot.

11:16AM 10 Q. And is there a basis for believing as to whether
11 that 300,000 pounds is the total amount of VOCs that were
12 disposed of at the site?

13 A. Well, certainly not. It's just one area. It's
14 just -- just that one area, and it's what's left now. It's
11:16AM 15 hard to know if there were other removal activities in that
16 area.

17 Q. And has there been any kind of assessment as to the
18 contamination beneath the Whittaker-Bermite site?

19 A. Um, yes, of course, um, in terms of groundwater
11:16AM 20 wells. We have a lot of information on contamination in the
21 groundwater system beneath the Whittaker-Bermite site.

22 Q. And the wells that you mentioned, are those
23 monitoring wells?

24 A. Um, yes. On the Whittaker site specifically, there
11:17AM 25 are about 200 monitoring wells that have been installed in the

1 various aquifer units beneath the site.

2 Q. And what type of information can you gather from
3 monitoring wells?

4 A. Well, the two primary data that you get from a
11:17AM 5 monitoring well are elevations of groundwater and the
6 concentrations of contaminants in that groundwater.

7 Q. And did -- has Whittaker been -- well, when do you
8 understand the Whittaker site was shut -- suspended their
9 operation?

11:17AM 10 A. I can't remember for sure what the year was, but I
11 have that on the timeline in my expert report.

12 Q. But it was quite a while ago, was it not?

13 A. Yes.

14 Q. Okay. And during the groundwater monitoring wells
11:18AM 15 that -- that are beneath the Whittaker site, have they been
16 monitoring groundwater contamination for the last 35 -- or the
17 last several decades?

18 A. Um, they -- they've been monitoring groundwater --
19 the first groundwater wells went in in 1985, but they really
11:18AM 20 were not helpful. They were located in certain areas, and
21 they -- they just weren't capable of defining the
22 contamination. It wasn't really until about 2002 that there
23 was an effort made to install a sufficient amount of wells to
24 look at the contaminants in all of the different aquifer units.

11:19AM 25 Q. And do you have -- do you have a graphic that

1 demonstrates the location of groundwater monitoring wells at
2 the Whittaker site?

3 A. Yes. We've looked at it over time, and I included
4 that in my expert report.

11:19AM 5 Q. And let's see. Can we -- can we pull up Figure 11
6 from your expert report, which has been stipulated for
7 publication.

8 MR. BLUM: Just the figure? Just the figure,
9 Your Honor?

11:19AM 10 THE COURT: So please describe what it is that
11 you --

12 MR. GEE: Oh, I'm sorry.

13 THE COURT: -- that you're planning on presenting
14 before you present it.

11:19AM 15 MR. GEE: Okay.

16 Q. (BY MR. GEE:) And you did --

17 MR. GEE: I'll lay a foundation again.

18 Q. (BY MR. GEE:) You did -- you did plot the location
19 of the monitoring wells at the Whittaker-Bermite site as part
11:20AM 20 of your evaluation?

21 A. Yes. We looked at it over time to illustrate what
22 we knew when, thinking in terms of when contaminants might be
23 migrating.

24 Q. And that would be Figure 11 from your expert report
11:20AM 25 that shows the location of the -- of the monitoring wells?

1 A. Yes. That sounds right.

2 MR. GEE: May I publish the Figure 11, Your Honor?

3 THE COURT: Is this part of an exhibit?

4 MR. GEE: This is -- yes. This is -- I'm sorry.

11:20AM 5 Stipulated Exhibit No. 168.

6 MR. BLUM: Your Honor, we have no objection. My
7 issue was, was he going to do the whole report? But as to this
8 exhibit, we have nothing to object to.

9 THE COURT: Okay. So you can present the figure as
11:20AM 10 you intend to do.

11 (Exhibit 168 received into evidence.)

12 Q. (BY MR. GEE:) Okay. Ms. Stanin, what -- what do
13 the black dots on this diagram represent?

14 A. The black dots that are shown on the Whittaker site
11:21AM 15 are monitoring wells. So it gives us an understanding of how
16 many monitoring wells were on the site prior to 1989. If you
17 look in that upper left-hand corner of these maps, you'll see
18 the time period that corresponds to the -- how many wells were
19 located where at what time.

11:21AM 20 Q. And was this around the time that the Whittaker site
21 ceased operation?

22 A. Yes. I think it was in 1987, but I'm -- I'd have to
23 check to be sure.

24 Q. And what do you know about the monitoring wells that
11:21AM 25 were installed back in -- prior to 1989?

1 A. Well, you can see that they're clustered in sort of
2 two areas. You can see the two black dots in the sort of
3 southeastern lower right-hand corner of the site and the one
4 dot up in the northern portion of the site. And they really
11:22AM 5 weren't in any of the areas where most of the contaminants are
6 migrating downgradient.

7 The two black dots are in an area of contamination,
8 but the early wells weren't sited well and they weren't
9 constructed in order to be able to determine the -- the levels
11:22AM 10 of contaminants in that area.

11 Q. And when you say they weren't constructed to
12 determine the -- the levels of contamination, what do you mean
13 by that?

14 A. Well, most of those early wells were below the water
11:22AM 15 table. Some of them weren't screened in aquifer materials. So
16 they were just -- they were just not as helpful as the
17 remaining 200 wells were that were ultimately drilled.

18 Q. And as time went on, did Whittaker install more --
19 additional wells at the site?

11:23AM 20 A. Yes, of course. And we have those animated. All
21 we've done is take Figure 11 and animate it.

22 And this next time period, we go sort of by decades,
23 about ten years here. So this next map that you see here is
24 the wells that were on the site as of 2001. You can see even
11:23AM 25 up to 2001, there really weren't wells throughout the entire

1 site that were capable of better understanding the groundwater
2 conditions, either flow or contamination.

3 Q. And are these wells placed in which you earlier
4 called the source areas that -- that -- of concern?

11:23AM

5 A. Well, the -- both of the clusters are in source
6 areas. They're just not in the source areas that we've talked
7 about. The source area in that lower right-hand portion of the
8 site, it was an impoundment. And that was a source of
9 contamination, in addition to the other source areas that we've
10 talked about.

11:24AM

11 The wells that are all the way on that northern
12 portion of the site, that's near the Metrolink area. Those
13 wells are -- are also sited to look at contaminants that were
14 migrating offsite in that area.

11:24AM

15 Q. And in your opinion, was -- were the wells that were
16 in place in 2001 sufficient to characterize the contaminant --
17 groundwater contamination beneath the Whittaker site?

18 A. No.

19 Q. And did Whittaker install additional wells following
20 2001?

11:24AM

21 A. Yes. In particular, there was an Imminent and
22 Substantial Endangerment Order, they call it. The Department
23 of Toxic Substances Control required that Whittaker site do
24 additional investigation. And after the order was there, there
25 were a significant number of wells that were installed.

11:24AM

1 We can go to the next animation. Now we're looking
2 at a lot of dots between 2002 and 2009. A lot of information
3 was added on the site.

11:25AM 4 Q. So is it true, then, that -- until -- until all
5 these wells were -- were installed after 2002, was -- was --
6 were professionals in your area able to characterize
7 contamination beneath the Whittaker site?

8 A. No.

11:25AM 9 Q. Okay. Now, Ms. Stanin, earlier you discussed the --
10 or you used the term "aquifer." Is there just one single
11 aquifer beneath the Whittaker-Bermite site?

12 A. No. There are actually several aquifer layers that
13 have been delineated beneath the site.

11:26AM 14 Q. And did you -- did you generate a demonstrative to
15 show us the layers beneath the Whittaker-Bermite site?

16 A. Yes. I had several what we call cross-sections in
17 my expert report that showed various wells along the aquifer
18 units.

11:26AM 19 MR. GEE: Your Honor, I'd like to display
20 Exhibit 185, which has been stipulated to, that shows the
21 aquifers as they stand, just briefly described.

22 MR. BLUM: No objection.

23 THE COURT: Received.

24 (Exhibit 185 received into evidence.)

11:26AM 25 THE COURT: Remember the procedure. Don't need to

1 ask permission. You've indicated stipulated. Move with it,
2 please.

3 MR. GEE: All right. Thank you, sir.

4 Q. (BY MR. GEE:) Now, Ms. Stanin, this drawing seems
11:27AM 5 to have quite a bit of information on it. You have on the
6 left-hand side what looks like Saugus 1 and Saugus 2. What are
7 Saugus 1 and Saugus 2?

8 A. So let me just explain that this is a slice of the
9 earth. So instead of looking down on top of a map, we've now
11:27AM 10 sort of looked into the earth so that we can see what these
11 aquifers look like with depth.

12 And the two wells that are labeled Saugus 1 and
13 Saugus 2 represent the water supply wells. So these are these
14 vertical lines that have been drilled down into the earth more
11:27AM 15 than a thousand feet in this case. And you can see that they
16 intersect the yellow areas and the -- sort of the gray areas on
17 this figure.

18 Q. And what do the yellow areas and gray areas depict
19 on this figure?

11:28AM 20 A. The yellow areas have been determined to be, um, the
21 layers that are more permeable, so more sands in the yellow
22 layers. So we refer to the yellow layers as the aquifers
23 units. And they've actually been named.

24 In this particular case, they are named with S, S-1,
11:28AM 25 S-3A, S-3C, S-5A, 5C, and 7. And what that designation refers

1 to is that this is -- geologically, this is called the Saugus
2 formation. So "S" stands for Saugus, and each one of those
3 yellow layers represents a separate aquifer in the system.

11:29AM 4 Q. Okay. And so just so I understand, there are
5 multiple aquifers that are separated by -- I'm sorry. What is
6 the gray -- the gray colorings in this drawing?

7 A. In many cases, the gray area is less permeable
8 material. It might be what we refer to as silts or clays.

11:29AM 9 In some areas, the gray is simply a marker that we
10 use from well to well to make sure we're tracing the aquifers
11 correctly. It doesn't mean that groundwater can't move through
12 the clay layers, but it just means that it moves more easily
13 through the yellow layers.

11:29AM 14 Q. Okay. And it looks like there are -- there is what
15 are -- what appear to be wells that are along the Whittaker
16 site, which is -- between the middle and the right of the -- of
17 this drawing?

11:30AM 18 A. Yes. So you can see the hills of the Whittaker
19 site. So they're represented there by the top of the graph,
20 and then you can see these vertical wells that go down into the
21 various aquifer layers. And beneath the Whittaker site, you
22 can see that the wells look a little different than the way
23 they're depicted at the Saugus 1, Saugus 2. And that's because
24 they are monitoring wells.

11:30AM 25 And so if you look in some of the yellow layers, you

1 can see little black squares. What that means is that that one
2 well is capable of pulling water and groundwater contamination
3 from that one aquifer layer. So these are clusters of wells
4 that are screened, we call them. It's an open area within the
11:30AM 5 monitoring well where water can move into the well and we can
6 sample the different aquifers.

7 Q. Now, were all -- all of these aquifer -- aquifers --
8 did all of the aquifers have contamination?

9 A. Um, yes, there were VOC and perchlorate
11:31AM 10 contamination discovered in all of the aquifer units.

11 Q. And -- and did any -- any of these aquifers have
12 more contamination than the others?

13 A. Yes. Definitely S-3s are where most of the
14 contamination resides.

11:31AM 15 Q. Okay. I'd like to pull up Table 5.

16 Let's see.

17 THE COURT: Is this from the same exhibit, Mr. Gee?

18 MR. GEE: Yes. This is from Ms. Stanin's expert
19 report.

11:32AM 20 Q. (BY MR. GEE:) And, Ms. Stanin, is this a diagram
21 that came out of your expert report?

22 A. Yes.

23 Q. And the "S" designations that -- that you show in
24 the left-hand column, are those the designation of the aquifers
11:32AM 25 that you -- that you showed in the previous drawing?

1 A. Yes.

2 Q. And let's see. You have three contaminants, I
3 believe they are TCE, PCE, and perchlorate. Are those
4 contaminants of concern in this case?

11:32AM

5 A. Yes.

6 Q. And what does this -- what does this table show --
7 show the -- well, first, what does this table demonstrate?

11:33AM

8 A. Well, I think the first thing it shows is that each
9 of the aquifer units, which we just talked about, have both VOC
10 contamination as well as perchlorate contamination. The
11 highest concentrations in any of those monitoring wells for
12 each one of these aquifer units is shown on the table.

11:33AM

13 So this gives you an understanding about the
14 elevation -- I mean, the concentrations of VOCs and perchlorate
15 that have been detected in some of the monitoring wells.

16 Q. Okay. And, for example, you have a figure for S-3A,
17 TCE of 4,700. Is that a big number?

11:34AM

18 A. Well, for contamination, we think of big and small
19 as being related to the drinking water standard. And so the
20 drinking water standard is sometimes referred to as a maximum
21 contaminant level, or MCL. And I have that on the table as
22 well. So you can see for TCE, the maximum contaminant level in
23 drinking water is only 5 parts per billion. So 4,700 is almost
24 a thousand times the MCL. So in that context, yes, it's a very
11:34AM 25 big number.

1 Q. Okay. And similarly, it looks like for perchlorate
2 there is a big number in S-3A. Ms. -- is it -- is that a large
3 number compared to the MCL?

11:34AM 4 A. Yes. Again, with perchlorate, the MCL is a little
5 bit different, but it's very similar. It's 6 parts per billion
6 rather than 5. So that's pretty close. So again, you know,
7 82,000 is a very large number with respect to safe drinking
8 water.

11:35AM 9 Q. Okay. And you're -- can you just -- you said there
10 are multiple aquifers beneath the site. Is there a reason that
11 you chose Saugus 3 and Saugus 5 to show in this table?

12 A. Well, those are the aquifers that are contaminated
13 in the areas of interest, so that's the reason for including
14 those on the table.

11:35AM 15 I will mention that that last aquifer -- yeah,
16 that's right. That's -- these are the aquifers beneath our
17 area of interest. There are other aquifers in other areas that
18 are also contaminated, but I haven't included them here.

11:35AM 19 Q. Okay. So you've -- you basically looked at the
20 contamination in the soil at the site. Now we're looking at
21 the groundwater beneath the site.

22 What did you do next?

11:36AM 23 A. So now that we know where the concentrations of the
24 contaminants are beneath the Whittaker site, the next step is
25 to look at groundwater flow directions to see where those

1 contaminants might migrate in groundwater.

2 Q. And you mentioned that there are methods that you
3 can use to determine the direction of groundwater flow?

4 A. Yes.

11:36AM 5 Q. And did you go through that exercise?

6 A. Yes, of course.

7 Q. And in general, what are the characteristics of the
8 Whittaker site and the aquifers beneath the Whittaker site that
9 helped you to determine which direction the groundwater flowed?

11:36AM 10 A. Well, one of the first things that you might do in
11 any problem of this magnitude is to look at where you are with
12 respect to the groundwater basin.

13 So there are 500 or so groundwater basins in the
14 state of California. And within those basins, there's a
11:37AM 15 regional groundwater flow regime. Those basins drain
16 groundwater. And as a result of that, there are already known
17 groundwater flow directions associated with those groundwater
18 basins. So looking at the basin was really one of the first
19 steps that we took.

11:37AM 20 Q. When you looked at the groundwater basin, did you
21 have a figure in your expert report that showed the overall
22 groundwater basin, would that be Exhibit 159?

23 A. I'm sorry. I don't have the number memorized, but
24 that sounds right.

11:37AM 25 (Exhibit 159 received into evidence.)

1 THE WITNESS: That's not it.

2 That's it.

3 Q. (BY MR. GEE:) And for what did you generate this
4 Exhibit 159?

11:38AM 5 A. So we have really changed scale on everyone here.
6 So let me orient you for a second.

7 You can see the Whittaker site that's located there
8 in sort of the -- the southeastern portion of this large blue
9 outlined area. The blue outlined area is the groundwater basin
11:38AM 10 that's been defined by the State of California.

11 And what we were doing is trying to better
12 understand what was going on with the groundwater basin and
13 where we were within it. You can see the water supply wells
14 there are in the valley area, which is indicated by the lighter
11:38AM 15 colors.

16 Q. And how does this help us understand how groundwater
17 flows in a general vicinity?

18 A. Well, the basin from a surface water perspective is
19 drained by the Santa Clara River. You can see that running
11:38AM 20 right through the center portion of the groundwater basin.

21 And so groundwater is mimicking the surface water
22 drainage in this basin. So it flows from the upland areas,
23 down toward the valley floor, and then mirrors underneath the
24 ground the Santa Clara River drainage which exits the basin
11:39AM 25 down there at the Los Angeles-Ventura County line.

1 Q. Are there any arrows that we have that might
2 demonstrate what you had just articulated?

3 A. Yes. I did add arrows. You can see that these are
4 just -- added them locally from the uplands on the Whittaker
11:39AM 5 site, downgradient toward the valley. And then if you continue
6 on with the arrows, you can see that, after they get to the
7 valley, then the natural flow direction moves northwestward
8 toward the Santa Clara River and then drains out the basin with
9 the surface water.

11:39AM 10 Q. Okay. And how does the regional groundwater flow
11 help you determine how -- the direction of local groundwater
12 flow?

13 A. Well, it provides the context. It provides you with
14 an understanding of where you are within a larger system. The
11:40AM 15 groundwater is being recharged over this entire area and, as a
16 result of that, there is a larger sort of flow system that
17 controls both regional and local flow.

18 Q. Okay. Now, you mentioned in your prior slides that
19 you have groundwater monitoring wells and production wells.
11:40AM 20 Are there differences in -- did the groundwater monitoring
21 wells and production wells influence groundwater flow direction
22 at all?

23 A. Um, yes, they can. Certainly pumping wells will
24 change groundwater flow within the area impacted by that well.

11:41AM 25 Q. And do you have a demonstrative that shows this?

1 A. Yes. I thought it was an important concept, so I
2 prepared a little diagram, some conceptual diagrams to look at
3 groundwater flow going into a non-pumping well and groundwater
4 flow going into a pumping well.

11:41AM

5 Q. And would a monitoring well be a non-pumping well?

6 A. That's correct. So you can think about this little
7 diagram for the well not pumping as a monitoring well. For
8 this example, you can see the fat blue arrow there. That's the
9 overall groundwater flow direction.

11:41AM

10 So just for the purposes of this little diagram,
11 groundwater's flowing from the right side of the slide to the
12 left side of the slide. And I've got little flow arrows that
13 go through what looks like little horizontal lines on that
14 well. So those little horizontal lines are screens. This is
15 where the groundwater can come into the well.

11:42AM

16 And so when the well's not pumping, the groundwater
17 flow system just flows by the well and then through the well
18 through those openings that are screened in the well.

19 Q. Okay. And how does that compare to a pumping well?

11:42AM

20 A. Well, things change with a pumping well because, as
21 you pump a well, you pull the groundwater area around you down
22 so you lower the groundwater level. It's called a cone of
23 depression. And it happens relatively radially around the
24 well.

11:42AM

25 And what that does is cause lower elevations near

1 the well. Remember, we talked about groundwater flows from
2 high elevations to low elevations. So now you've made low
3 elevations around the pumping well, and you can pull water in
4 from a much larger area than if you are just a static
11:42AM 5 monitoring well and water's just flowing by you.

6 Q. Okay. And why is this important to -- to your
7 evaluation of the -- of the contamination at the site?

8 A. Well, the contaminant evaluation is looking for
9 plausible pathways of how contaminants might reach the water
11:43AM 10 supply wells. So if you are a pathway going to a water supply
11 well, you need to have some kind of an understanding about
12 where you will be captured by that well. So you don't have
13 to -- you don't have to have a pathway that hits the well
14 dead-on. The pathway can be near the well and then the
11:43AM 15 contaminants be drawn into the well.

16 Q. And do you have a demonstrative to show us the
17 impact of pumping?

18 A. I do. So I started with this profile, but now let's
19 look at a map view. And again, we're looking at well not
11:43AM 20 pumping and then the well pumping. So let's look at the not
21 pumping first.

22 So on the not pumping side, you see sort of a grid
23 that goes up and down, vertical lines that are black. Those
24 are the groundwater elevation contours that we measure from the
11:44AM 25 wells and we put this together, and that helps us know the

1 direction of groundwater flow. Again, we're flowing from the
2 right-hand side of the slide to the left-hand side of the slide
3 on this diagram.

4 So the flow lines are shown there going just
11:44AM 5 parallel to the groundwater elevations. That's -- that's the
6 way we do it. And when the well's not pumping, again just like
7 we saw in that cross-section, they go right by the well.

8 Q. And the well not pumping, that -- that would be
9 more -- more demonstrative of what happens at monitoring wells;
11:44AM 10 is that right?

11 A. I'm -- so the well not pumping would be similar to
12 what would happen in a monitoring well. But for a pumping
13 well -- and we've been -- pop that up.

14 So again, water levels are being lowered at that
11:45AM 15 well. So it makes a little circle sort of around that well.
16 And it's not perfectly circle, it's a little asymmetric because
17 groundwater's kind of flowing from uphill to downhill so you
18 can catch what's coming downhill a little bit better than you
19 can pulling back something that has already flown by you.

11:45AM 20 But I think you can see that the elevation contours
21 now, they're not just straight lines. They're circling around
22 the pumping well because the pumping well is drawing more and
23 more groundwater into it. And the flow lines indicate that a
24 much larger area is going into the well than if the well was
11:45AM 25 not pumping.

1 You can see at the bottom there, we think of this as
2 capture. We call it "captures." So the pumping well captures
3 groundwater from a much larger area than a non-pumping well.
4 And, of course, if the groundwater is contaminated, that means
11:45AM 5 that the pumping well can capture a much larger area of
6 contamination as well.

7 Q. That was my next question, is that if -- if you have
8 a pumping well, does it -- does -- does the act of pumping draw
9 contaminants in from a greater area?

11:46AM 10 A. Yes, a much greater area than for a well that's just
11 sitting there waiting for contamination to come from upgradient
12 to downgradient.

13 Q. And so the contamination levels that you see at a
14 pumping well is not necessarily a good measure of where that
11:46AM 15 contamination is coming from? Is that --

16 A. No. I think you can say where it's coming from.
17 The pathway goes near the well. But you have to anticipate
18 that the well was pumping, so then you better understand how --
19 how much of an area can be drawn in by that well.

11:46AM 20 Q. Okay. All right. So -- and does the pumping well
21 influence the rate of groundwater flow?

22 A. Yes. It increases the velocity near the well
23 because the water is being drawn down. So the gradient from
24 high elevation to low elevation is exaggerated with a pumping
11:47AM 25 well.

1 Q. Okay. A couple of minutes ago, you showed -- we
2 looked at the regional groundwater flow for the -- around the
3 Santa Clara Water Basin. Did you do a -- or did you analyze
4 the groundwater flow as it relates to the Whittaker-Bermite
11:47AM 5 site?

6 A. Yes, of course.

7 Q. And I'd like to publish Exhibit 61.

8 (Exhibit 61 received into evidence.)

9 Q. (BY MR. GEE:) Is this something that you prepared,
11:47AM 10 Ms. Stanin?

11 A. The map actually is from a published document by
12 other hydrogeologists, but I am using it for the purposes of
13 overall local flow in the south fork of the Santa Clara Valley
14 in this area.

11:48AM 15 Q. And so taking a look, I see some -- some blue lines
16 that have numbers written on it, like 1300, 1250 -- or 1200,
17 1100. Well, what are those lines?

18 A. Those lines are the groundwater elevation lines. So
19 these -- this is the elevation of the groundwater beneath the
11:48AM 20 surface.

21 Q. And did you previously refer to those as contour
22 lines?

23 A. Yes. I did.

24 Q. And again, what was the importance of contour lines?

11:48AM 25 A. The contour lines give you some sort of framework so

1 that you can draw flow lines perpendicular to those and have an
2 understanding of the direction the groundwater's flowing.

3 THE COURT: And, Mr. Gee, when you're referring to
4 exhibits that are attached to her report, please make sure that
11:49AM 5 you're not just referring to the exhibit but also referring to
6 the fact that it's attached to her report so the record is
7 clear.

8 MR. GEE: I will do so, Your Honor. Thank you.

9 Q. (BY MR. GEE:) And once you drew the contour lines,
11:49AM 10 did you do anything else with this -- this exhibit?

11 A. I think there are some flow arrows that I just
12 simply added to give us a little bit of understanding that,
13 again, groundwater's flowing from the upland areas toward the
14 South Fork Valley and then toward the Santa Clara River. There
11:49AM 15 aren't any flow arrows on the Whittaker site at this point.
16 This is only sort of these regional flow lines.

17 But after Whittaker installed a lot of the wells,
18 especially after 2002 and going forward, that provided a lot
19 more detail for on-site flow lines to be drawn.

11:49AM 20 Q. Okay. And once you have the groundwater flow near
21 the Whittaker-Bermite site, did you take a closer look at the
22 impacted areas at the groundwater -- at the Whittaker-Bermite
23 site?

24 A. Yes, to look at groundwater flow for those areas.

11:50AM 25 Q. And did you use the same concept of drawing contour

1 lines and drawing flow arrows and -- in your analysis?

2 A. Yes. I used the contour maps that are published
3 quarterly by Whittaker consultants.

4 MR. GEE: Okay. I'd like to introduce Exhibit 190,
11:50AM 5 which is stipulated and was part of Ms. Stanin's expert report.
6 (Exhibit 190 received into evidence.)

7 THE COURT: And again, for clarity purposes, is this
8 a standalone exhibit or is this part of her expert report
9 exhibit?

10 MR. GEE: We identified this as being a standalone
11 exhibit.

12 THE COURT: And if you would use that term, that
13 would be clear, standalone exhibit versus it's an exhibit to
14 her report.

11:51AM 15 MR. GEE: Okay. Yeah.

16 THE COURT: Thank you.

17 MR. GEE: Thank you.

18 Q. (BY MR. GEE:) And, Ms. Stanin, what does this
19 drawing represent?

11:51AM 20 A. So now we've sort of focused in on the western
21 portion of the Whittaker site. And these are contours,
22 groundwater elevation contours drawn by Whittaker. And they
23 measure the elevation of the groundwater in each one of those
24 black dots. And then they post that data and draw these blue
11:51AM 25 contours to help us understand local groundwater flow.

1 Q. And again, you have -- looks like you have flow
2 direction arrows. And are those flow direction arrows
3 perpendicular again to the contour lines?

4 A. They are. And I reproduced those from the Whittaker
11:51AM 5 report, just so that we would all understand that this is not
6 my interpretation. This is Whittaker's maps. So I agree with
7 it. But the flow lines were put onto the map by Whittaker.

8 Q. Okay. And what did you do next?

9 A. Um, so the, um -- you have a good understanding at
11:52AM 10 this point with the contour map on potential groundwater
11 pathways. And so you can draw perpendicular lines to begin to
12 develop pathways moving from the areas of contamination offsite
13 so you can get some kind of understanding about direction.

14 And I've got two of the pathways indicated here by
11:52AM 15 these green arrows. So again, the process is sort of following
16 perpendicular to the groundwater elevation contours and seeing
17 where that leads you in an offsite direction.

18 Again, I left the blue flow line arrows on to
19 demonstrate that I'm being consistent with the flow directions
11:53AM 20 indicated by Whittaker.

21 Q. And did you do anything else with this diagram to --
22 that may help us understand whether or not these flow
23 directions are, indeed, the flow directions of groundwater?

24 A. Well, in this particular case, we also had some of
11:53AM 25 the contaminants shown with these maps. And so I reproduced

1 that in order to show that the groundwater quality data also is
2 consistent with these pathways.

3 So what has just been popped up is this -- these
4 pink areas, which are concentrations of perchlorate in
11:53AM 5 groundwater.

6 Q. And just for clarification, Ms. Stanin, which of the
7 aquifers did you choose to make this depiction?

8 A. This is in one of the S-3 aquifer layers. Again,
9 it's where most of the contamination resides.

11:54AM 10 Q. Okay. And I notice that the flow lines and the
11 contamination flow both to the north and south of OU-4. Is
12 that the predominant flow pattern?

13 A. Yes. You see that northwesterly pathway in a lot of
14 the groundwater elevation data, even going back to the 1990s.

11:54AM 15 I think we had in our 2003 expert report that pathway
16 delineated at that time as well.

17 Q. So does this demonstrate that most of the
18 groundwater flow and contamination -- contaminants flow around
19 the western border of the Whittaker-Bermite site?

11:55AM 20 MR. BLUM: Objection. Leading.

21 THE COURT: Sustained.

22 Q. (BY MR. GEE:) What does this tell you about
23 groundwater flow along the western portion of the
24 Whittaker-Bermite site?

11:55AM 25 A. Well, the -- as indicated by the two green pathway

1 lines, we see that groundwater is flowing to the northwest off
2 of the site, migrating off of the site. And to the west --
3 almost southwest in some portions of the site, they are turning
4 back toward the northwest.

11:55AM

5 Q. Okay. And once you established that -- the flow
6 directions leaving the Whittaker-Bermite site, did you do
7 anything to determine as to possible pathways to the production
8 wells that were -- were part of your study?

11:56AM

9 A. Yes. So you can see that both of those example
10 pathways that I have plotted on this map go toward the water
11 supply wells. You can see that that northerly pathway that
12 I've drawn, that green line sort of pointing toward the
13 Saugus 1 and Saugus 2 wells and the southerly green line is
14 pointing sort of toward the V-201 well.

11:56AM

15 Q. Okay. And were the Saugus 1 and 2 and V-201 wells,
16 were they the only ones that were impacted from the
17 Whittaker-Bermite site?

11:56AM

18 A. Um, well, with respect to perchlorate, all four
19 wells have been impacted. And with respect to TCE, all four
20 wells have been impacted. When I say "four wells," I mean the
21 Saugus 1, Saugus 2, V-201 and V-205.

22 Q. Okay. And once you establish the flow pattern off
23 of the Whittaker-Bermite site, what did you do next?

11:57AM

24 A. Well, the delineation of pathways exercise goes a
25 little bit further than just these two green lines. So we

1 looked at additional pathways at various times and plotted
2 those as well.

3 Q. And would that be the stipulated Exhibit 184 that --
4 from your expert report that I would like to publish at this
11:57AM 5 time?

6 (Exhibit 184 received into evidence.)

7 THE WITNESS: Yeah. So there are -- there are --
8 the first thing that you see on this animation here is just
9 sort of a dot map. And we haven't talked about this yet --

11:58AM 10 (Telephonic interruption.)

11 MR. BLUM: Sorry, Your Honor.

12 THE WITNESS: What we see on the map are colored
13 dots, and these are the monitoring wells. And I've color coded
14 these wells with respect to TCE concentration.

11:58AM 15 So the highest concentration that had been seen in
16 that well got a color code. And the purple and the red are
17 higher concentrations than the yellow. And then you go down to
18 green. And then the white dots have not detected
19 perchlorate -- I'm sorry, have not detected TCE.

11:58AM 20 So you can see from the map that there are very few
21 wells that have not detected the VOC contamination with respect
22 to TCE. And you can see the areas where the -- the
23 concentrations are the highest.

24 Q. (BY MR. GEE:) And the concentrations that are
11:58AM 25 highest, just looking at the table, is the ones that are in

1 purple; is that correct?

2 A. Yes.

3 Q. And how much -- and what did you compare the -- the
4 concentrations to when you -- when you made this drawing?

11:59AM 5 A. Again, we're comparing these two, the drinking water
6 standard. So the MCL, which is shown there on the legend. So
7 the concentrations that are purple are greater than 100 times
8 the MCL, for example. So when you see a purple dot, then that
9 concentration was 500 parts per billion or micrograms per liter
11:59AM 10 in groundwater in that well at one time.

11 Q. And approximately what is -- what was the highest
12 reading that -- that you picked up in any one of these
13 monitoring wells? Do you remember?

14 A. Yeah. I think for TCE, it was almost a thousand
11:59AM 15 times the MCL. We just saw that on a table. My recollection
16 is 4,700 micrograms per liter.

17 Q. Okay. And once you -- once you plotted the
18 concentrations in the onsite monitoring wells, what did you do
19 next?

12:00PM 20 A. Well, as a check for the TCE, I took a look at where
21 we had seen perchlorate. So there was the comparison of
22 where's perchlorate in groundwater to where is TCE in
23 groundwater.

24 Q. And what does this -- what does this, I guess,
12:00PM 25 yellowish orange shading represent?

1 A. So you can see by the label that's in that upper
2 left-hand corner there, this is the max -- the approximate
3 extent of perchlorate that's been detected above the reporting
4 level in the Saugus aquifer. So this is a sort of way of
12:00PM 5 looking at the contaminant -- I mean, the coming of plumes of
6 perchlorate in the area.

7 And the reason for comparing my dot map, I'll call
8 it, to the orange extent area is I was seeing, you know, are
9 there areas where the TCE has been detected and are those the
12:01PM 10 areas within the perchlorate plume? And I think you can see
11 that the answer to that is generally yes.

12 Q. And I believe you testified earlier that the
13 contaminants move from the Whittaker site in the same general
14 direction, meaning that -- I guess TCE and PCE move in the same
12:01PM 15 direction as perchlorate?

16 A. Yes.

17 Q. Would the TCE and PCE ultimately move into the areas
18 that you have depicted in the orange yellowish plume?

19 MR. BLUM: Objection, Your Honor. Assumes facts not
12:01PM 20 in evidence and speculation.

21 THE COURT: Rephrase your question, please.

22 Q. (BY MR. GEE:) Ms. Stanin, is there any dispute
23 among the expert witnesses as to whether TCE and PCE flow in
24 the same direction, general direction as perchlorate?

12:02PM 25 A. No, I don't think so.

1 Q. Has any of Whittaker's experts argued that the TCE
2 and PCE do not flow in the same direction as perchlorate?

3 A. Not that I'm aware of.

4 Q. Okay. So would you expect TCE and PCE to ultimately
12:02PM 5 reach the areas where perchlorate has reached?

6 MR. BLUM: Speculation.

7 THE COURT: Rephrase your questions in terms of
8 expert opinion, please.

9 MR. GEE: Okay.

12:02PM 10 Q. (BY MR. GEE:) As an expert, would you conclude that
11 the TCE and PCE would ultimately match or develop a plume, if
12 you will, that is similar to the plume that we see in orange
13 and yellow -- orange-ish yellow?

14 A. Well, the analysis is specifically to the water
12:03PM 15 supply well. So it would definitely reach the water supply
16 wells. And my opinion is that it has.

17 Q. Okay. And once you -- once you've -- once you've
18 developed this plume map, what did you do next?

19 A. Well, I don't know if it was actually next, but I
12:03PM 20 did a lot of additional things to corroborate and to support
21 the analysis going forward. Um, I -- I did check the
22 pathway -- the pathways that I had delineated and specifically
23 for the most contaminated aquifer layer, and those are these
24 arrows now.

12:04PM 25 So we've been looking at blue arrows before as flow

1 lines, and that's generally what these still are except for
2 that I interpreted these lines based on a series of water level
3 contour maps over time.

12:04PM 4 And so, again, I think you can see that the blue
5 arrows fall within the orange area of perchlorate, indicating
6 that the pathways of TCE are similar to the pathways for
7 perchlorate.

12:04PM 8 Q. These drawings of pathway arrows, I believe they
9 come from trial Exhibit 194 that was stipulated. Is that
10 correct, Ms. Stanin?

11 A. That -- that may be right. I'm not 100 percent sure
12 of the trial exhibit. But it's Figure 20-7, I believe, in my
13 expert report.

14 (Exhibit 194 received into evidence.)

12:05PM 15 Q. (BY MR. GEE:) Okay. Now, when we mention pathways
16 and these depictions, are you suggesting that the contaminants
17 flow exactly on these blue arrows?

12:05PM 18 A. No. You can see the blue arrows themselves have a
19 little bit of thickness. There's a little bit of sinuosity in
20 the groundwater system. So that occurs over time. And
21 groundwater changes flow directions just a little bit here and
22 there with respect to flood years and drought years and -- and
23 that kind of thing.

12:05PM 24 But in general, the pathways are reasonable for
25 getting from the Whittaker site to the water supply wells.

1 Q. Okay. Ms. Stanin, once you drew these pathways, did
2 you do anything to -- what was the next step of your analysis?

3 A. Well, just keeping along the same lines of looking
4 at the comparison of where perchlorate is and where TCE is, I
5 did look at about 20 or so graphs of contamination
6 concentration over time and compared those graphs for TCE to
7 the graphs for perchlorate to see if those two contaminants
8 seem to be varying together, in other words, fluctuating
9 together. When the TCE goes up, does the perchlorate go up?

10 When the TCE goes down, does the perchlorate go down? So we
11 call those covariance charts.

12 Q. And did you have covariance charts in your expert
13 report?

14 A. Yes, we did, three large figures of multiple graphs.
15 I think there are 20 or so in the expert report. I didn't
16 think everybody wanted to see every single graph from that
17 report, so I selected three of them as examples.

18 Q. And were these figures from your expert report
19 marked separately as Exhibits 172 and 173?

20 THE COURT: Why don't you just present them to her.
21 She's not going to remember what the exhibit numbers are.

22 MR. GEE: Okay. All right. I'd like to present
23 Exhibit 172 and 173.

24 (Exhibits 172 and 173 received into evidence.)

25 Q. (BY MR. GEE:) Are these figures from your expert

1 report, Ms. Stanin?

2 A. Yes. They're a combination of two figures but yes.

3 Q. And what do these figures represent?

4 A. So I just mentioned the graphs. So let's take a
12:07PM 5 look at these graphs so we can see what we're doing here.

6 So these are graphs of concentrations of TCE, green,
7 and perchlorate, red, over time. And the graph's concentration
8 levels are shown on the left there on a logarithmic scale. And
9 time from about 2006 to -- through 2020 is shown there as the
12:08PM 10 date on the X axis.

11 And so the point of taking a look at these graphs is
12 to see whether or not the graphs are similarly varying for the
13 two different contaminants. Again, if one goes up, does the
14 other one go up? If one goes down, does the other one go down?

12:08PM 15 It isn't perfect because the concentrations in
16 groundwater are going to vary a little bit more than this over
17 time. But I think you can generally see and agree with me that
18 the two curves that you see in each one of these graphs seem to
19 indicate that they are varying together. And because they're
12:09PM 20 varying together, then that indicates that at these locations,
21 they're migrating together in the groundwater.

22 Q. Okay. So after you establish that the contaminants
23 covaried at the Whittaker site, what did you do next?

24 A. I looked offsite as well, and there was good
12:09PM 25 covariance in a variety of the areas. Essentially what I'm

1 trying to do with the entire process is to see whether or not
2 TCE and perchlorate are migrating together because we know that
3 perchlorate is already in the water supply wells.

12:09PM 4 So if TCE is migrating along the same pathways and
5 with the perchlorate, then the TCE in the water supply wells
6 may also be from Whittaker.

7 Q. Okay. And once you establish the groundwater flow
8 direction and look at the contamination, did you look again at
9 the cross-section of the -- of the -- of the land beneath -- or
12:10PM 10 of the Whittaker site? And what -- what did you -- what did
11 you conclude with respect to the pattern for which
12 contamination flows beneath the site?

13 A. Well, so everything that we've been looking at with
14 respect to these concentrations so far have been on maps. And
12:10PM 15 so, again, I wanted to go back to the slice of the earth and
16 make sure that it made sense with respect to the contaminated
17 aquifers.

18 So this is the profile that we saw before, remember
19 the yellow layers are the primary aquifers that we see beneath
12:11PM 20 the site and they are the wells beneath the Whittaker site and
21 the water supply wells. And so our overlay here on this is the
22 contamination that we saw from the monitoring wells has been
23 plotted and adhered to on this diagram and the contamination
24 that we see in the water supply wells as well.

12:11PM 25 So what this represents in this subsurface is an

1 area of the TCE plumes that I'm mapping with respect to the
2 pathways. This is a profile along with those pathways. And
3 you can see that the TCE contamination that's been seen in the
4 water supply wells are in the same aquifer areas. They're on
12:11PM 5 the same pathway. And they're upgradient with respect to
6 groundwater flow.

7 So it makes a lot of sense, I think, that the TCE
8 that's seen in Saugus 1 and Saugus 2 originated from the
9 Whittaker site.

12:12PM 10 Q. And does this diagram -- is this document consistent
11 with the table that you had, Table 5, that showed the highest
12 levels of contamination in HSU-3 and HSU-5?

13 A. Yes.

14 Q. And, Ms. Stanin, did you conduct any analysis in
12:12PM 15 terms of groundwater flow rates?

16 A. Um --

17 Q. Or contamination flow rates? I'm sorry.

18 A. Yes. Um, only -- only as an order of magnitude
19 estimate to make sure that the groundwater velocities were not
12:12PM 20 going to be a controlling factor in the analysis. Other
21 experts are doing more detailed work on that, so I didn't have
22 to cover all of that in the scope of my work.

23 But I did want to include some of the information
24 and data that we had to make sure that, you know, it wasn't
12:13PM 25 something that was going to say that the contamination didn't

1 leave the site until, you know -- at the middle ages, for
2 example. You have to kind of make sure you're in the ballpark
3 with respect to the groundwater flow times.

12:13PM 4 Q. And did you calculate the groundwater velocities in
5 the most impacted zones of S-3 and S-5?

6 A. Yes, we did.

7 Q. And was that in your expert report?

8 A. Yes, it was.

12:13PM 9 Q. And I'd like to display Table 8 from your expert
10 report, which is Exhibit 526.

11 MR. GEE: Which is stipulated.

12 THE COURT: So this is a standalone Exhibit 526?

13 MR. GEE: Yes.

14 THE COURT: Thank you.

12:14PM 15 Q. (BY MR. GEE:) And, Ms. Stanin, what do we see in
16 this table? What is on the left-hand side -- or left-hand
17 column?

18 A. Those are the aquifer designations. So you can see
19 that I've included S-3, S-5, and S7, the details on this table.

12:14PM 20 Q. And in the second column you have "Area," why did
21 you -- and what does onsite and offsite refer to?

22 A. Onsite is -- is the Whittaker site. So the data
23 that's incorporated into the rest of the calculations for the
24 onsite came from onsite well data, and the offsite came from
12:14PM 25 the offsite water supply well data.

1 Q. And hydraulic conductivity? What is that, just in
2 very general terms?

3 A. It's representative of the properties of an aquifer.
4 It has to do with how fast water would drain from an aquifer if
12:15PM 5 you turned it up and gave it a gradient of 1. So it just gives
6 you some kind of an idea about the permeability and properties
7 of the aquifer.

8 Q. And similarly, hydraulic gradient. What -- in very
9 general terms, what is a hydraulic gradient?

12:15PM 10 A. Well, remember we talked about groundwater flowing
11 from high elevation to low elevation. And so if you take those
12 two numbers, that represents a gradient. So that's how you get
13 the groundwater gradient.

14 Q. And the last column you have, Average Linear
12:15PM 15 Groundwater Velocity, what does that number represent?

16 A. Um, it's pretty self-explanatory. It talks about it
17 being an average velocity, which is correct, that's what the
18 equation is -- is meant to look at. And it's linear in that
19 there are a lot of kind of little sinuous ways that water would
12:16PM 20 move around the sand grains, but we're talking about a velocity
21 that is sort of average, just in a linear direction. So it
22 might be moving faster in the subsurface. But overall, it
23 takes a while just to get from Point A to Point B, and that
24 linear portion is what's embedded in the equation.

12:16PM 25 Q. And I notice that, for example, in HSU No. 3, you

1 have both an onsite and offsite groundwater velocity. Is there
2 an explanation as to why the onsite groundwater velocity is so
3 much higher than the offsite groundwater velocity?

12:16PM 4 A. Yes. It's a function of how you determine what's
5 going on with respect to the velocity. So the hydraulic
6 conductivity is field data. You pump a well. You do
7 measurements. You get some understanding of the properties of
8 the aquifer from that process. And so onsite wells, remember
9 those groundwater monitoring wells give you the opportunity to
12:17PM 10 look just at an aquifer layer. But the water supply wells are
11 screened over multiple layers. So when you pump that well,
12 you're getting water from all of the aquifer layers that are in
13 that well.

14 And so that's sort of averaging. We call it a bulk
12:17PM 15 average. And that's sort of averaging all of the information
16 from all of those various aquifers. And as a result of that,
17 you're combining the really fast aquifers with the really slow
18 aquifers. So you get this sort of averaged number.

19 Q. Okay. And I notice a similar pattern for Saugus --
12:17PM 20 the S-5. Did you also use field data to -- to make these
21 calculations?

22 A. Yes. Everything on this table is based on measured
23 data from the field.

24 Q. Okay. I'd like to go back to the -- what was called
12:18PM 25 Exhibit 190.

1 Ms. Stanin, when you took a look at the travel -- or
2 the distance, the travel from, let's say, the burn area, which
3 I believe was one of the heavily impacted areas, to Saugus 2,
4 about what percentage of the migration pathways -- pathway is
12:18PM 5 onsite in HSU-3?

6 A. Um, almost all of it. Um, you know, maybe 80,
7 90 percent. You can't exactly see that on this figure because
8 it doesn't include OU-3 on here. Maybe if you go to the
9 exhibit that we looked at just after this one, we'll have the
12:19PM 10 whole Whittaker site on that one and you maybe can see it a
11 little bit better.

12 Yeah. Thank you. So --

13 THE COURT: Let's just make sure you have a record
14 of what --

12:19PM 15 MR. GEE: I'm sorry.

16 -- what we're looking at what was previously
17 displayed as Exhibit 184, which is a diagram from Ms. Stanin's
18 expert report.

19 THE WITNESS: Right.

12:19PM 20 THE COURT: Please continue.

21 THE WITNESS: And if you could pop up the flow
22 lines, the pathways arrows that I think are on here as well.

23 So the -- the Burn Valley that you were talking
24 about, OU-3, is actually the -- in the central portion -- oh.

12:20PM 25 I was told I could draw on this. Is that correct?

1 Q. (BY MR. GEE:) Yes. I believe you could.

2 A. Okay. So here's the burn area.

3 And the question that you asked me was if I am going
4 from the purple burn area up to the Saugus 1 well along this
12:20PM 5 pathway here, which doesn't extend all the way down there on
6 just this map, then how much of that is actually onsite versus
7 offsite?

8 So if I do just a little bit of a drawing here --
9 hang with me -- and then I connect up my pathway and I go to
12:20PM 10 these wells, you can see that from this area to this area, we
11 are on site from here (indicating) to the beginning. And then
12 the offsite area is this last little portion going toward the
13 well.

14 Q. Okay. And can we go back to Table No. 8, which was
12:20PM 15 Exhibit 526.

16 A. Oh, dear. Can I get rid of that now?

17 Q. So, Ms. Stanin, are you saying that the -- the --
18 from the burn area to Saugus 2, the proper groundwater velocity
19 to apply would be the onsite groundwater?

12:21PM 20 A. Correct.

21 Q. And that would be 6.65 feet per day?

22 A. Correct.

23 Q. Based on 6.65 feet per day, approximately how long
24 would it take for contamination in the Burn Valley area to
12:21PM 25 reach the -- the border of the Whittaker-Bermite site?

1 MR. BLUM: Objection. Beyond the scope of the
2 report and her deposition.

3 Q. (BY MR. GEE:) Did you do a calculation, Ms. Stanin,
4 in terms of -- in your expert report on the amount of time it
12:22PM 5 would take for materials to travel to the border of the
6 Whittaker-Bermite site?

7 A. So I believe the expert report had the, um,
8 estimation of feet per year of onsite for average onsite
9 groundwater velocities.

12:22PM 10 Q. And based on your average, what was the average
11 onsite groundwater velocity that you used in your expert
12 report?

13 A. Onsite, I think it was 5.6, perhaps, something like
14 that.

12:22PM 15 Q. Okay. And based on that 5.6 feet per day, did you
16 make a rough estimate in terms of how long it would take for
17 contamination on the Whittaker-Bermite site to reach the
18 boundary of a Whittaker-Bermite site in your expert report?

19 MR. BLUM: Your Honor, this is not in the expert
12:23PM 20 report.

21 THE COURT: Overruled. She's asked the question
22 that you're objecting to.

23 THE WITNESS: I think what I did is show that the
24 movement of groundwater would be consistent with about
12:23PM 25 3,000 feet per year. And so you can just determine -- you

1 can -- it's just simple math after that. If you want to go
2 from the burn area and it's 10,000 feet, then three-and-a-half
3 years, something like that. It's an estimate.

12:23PM 4 MR. GEE: Okay. Your Honor, I would like to enter
5 Exhibit 526 into evidence.

6 THE COURT: It will be received.

7 (Exhibit 526 received into evidence.)

8 Q. (BY MR. GEE:) Ms. Stanin, did you do anything else
9 in your expert report that would be helpful to understand the
12:24PM 10 flow paths and the flow velocity of contamination from the
11 Whittaker site to the groundwater wells?

12 A. Well, there were a variety of other things in the
13 expert report, but I think we've covered most of the pathway
14 analysis.

12:24PM 15 MR. GEE: Okay. Your Honor, I'm finished with my
16 examination.

17 THE COURT: All right. What we'll do, since it's
18 now 12:25, is we'll go ahead and break until -- we'll take a
19 30-minute break, and that will take us to just five minutes to
12:24PM 20 1:00.

21 So please remember, do not speak to anyone about the
22 case, the people, or the subject matter involved. Continue to
23 keep an open mind.

24 Please leave your notebooks behind and take
12:24PM 25 everything else with you and enjoy your lunch. See you back

1 here in -- at 12:55. Thank you.

2 THE COURTROOM DEPUTY: All rise for the jury,
3 please.

4 (Out of the presence of the jury:)

12:25PM

5 THE COURT: We're in recess until 12:55.

6 (Morning proceedings adjourned at 12:24 p.m.)

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